                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

5

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1578:

    AAATTGTCAC TnCAGGTCAT AACCAACCAG GTGGGACTGC ACGAGCGTTA CTAATGATCC   60

    AACGGTCTTG CTTTGTGATG AGGCAACAAG TGCACTTGAT CCGC   104

    (2) INFORMATION FOR SEQ ID NO: 1579:

            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 89 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

20

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1579:

    GCTCAATAGA TACAACTATT AGGACAACGG ACTATCGTTT ACAATTTATT CCAGATAAGG   60

    ATCGCGCAGG TCGTATGCGT AACTATGCA   89

    (2) INFORMATION FOR SEQ ID NO: 1580:

            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 102 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

35

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1580:

    TTGTCTCTAA TAATGGnTTT GGCTTTTTCT AAAATTTCAG ATGTGGGTGC TGGTGAAGCA   60

    CCGACTGGTT AATTTTCTTG TCGTCACGGC CACTTTTTGT TT   102

    (2) INFORMATION FOR SEQ ID NO: 1581:

            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 102 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

50

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1581:

    AAGGTGCTGT TATTAGGATA ATGnATTTAA ACCCCATGGT ATGAAGGATA TCTGGAAGTT   60

    AGATTGGATA TCCCTTAACC ATGGGGGGTT TTATTTTTGG GG   102

55

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 160 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1582:

```
TTCAGGGGAG CTGAACATAT TGACGACTTT TGGGTCAATT CATTTTGCAT TTTACTTTTA          60

AATGCGTTGT TGCATGTAAT TGTATTAACG ACATACATGG TGGGGCTCTA AATnAATGCT         120

TGACTAATTT CTTGGATGGA GACCACGATT TACCAACTCA                              160
```

(2) INFORMATION FOR SEQ ID NO: 1583:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 348 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1583:

```
TAAAAGCAAG TACATTAGAG GTTAGATCAC AAGCTACTCA AGACTTGAGT GAATATTATA          60

ATAGACCGTT CTTTGAGTAT ACAAATCAGT CAGGATATAA AGAGGAAGGA AAAGTGACGT         120

TTACTCCTAA TTATCAACTT ATAGATGTAA CTTTAACTGG GAATGAAAAG CAAAATTTTG         180

GTGAAGATAT TTCTAATGTA GATATATTTG TTGTAAGAGA AAATTCTGAT AGATCTGGTA         240

ATACAGCTTC AATTGGTGGT ATTACTAAAA CAAAcGGTTC AAATTATATT GATAAAGTAA         300

AAGATGTAAA TTTAATAATT ACTAAAAACA TCGATAGTGT TACATCAA                     348
```

(2) INFORMATION FOR SEQ ID NO: 1584:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 73 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1584:

```
AGCCAGCAGT AGATAGATAT ATTAATGAAT TCTTGGAGAA AGGTAGCTCA AATTGTCCAA          60

TTGAGATATT GAA                                                           73
```

(2) INFORMATION FOR SEQ ID NO: 1585:

        (A) LENGTH: 255 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1585:

GTAAGGAATG GTCACGTATT CCACACTTCT ATATGAATTA TTATGTATAT CAATACGCAA   60

mTGGTTACAG TGCAGCTCAA AGCTTAAGTC ATCAAATTTT AnCAGAAGGT AAGCCAGCAG   120

TAGATnGATA TATTAATGAA TTCTTGAAAA AAGGTAGCTC AAATTATCCA ATTGAGATAT   180

TAAAAAATGC TGGTGTAGAT ATGACAACAC CTGAACCAAT TGAACAAGCT TGTGAAGTTT   240

TTGAACAAAA ATTGA   255

    (2) INFORMATION FOR SEQ ID NO: 1586:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1586:

TTATTAGGTG AnTCCATTGG CAACATTGAT TGGTTTGTCA TTAGGACAAA TTTTATTATA   60

CATTGGCGTT ATTTTTACTA TCTTATCTGG TATTGAATAC TTTTATAAAG GTAGAGATGT   120

TTTTAAACAA AAATAAATAT TTGTTTATAC TAGATTTCAT TTTCATATGG AATCTAGTTT   180

TTTTAATCCC AATTTTAGAA ATTAGCCACG CAATTGTTTA TAATGATATA TTGTAAAACA   240

ATATTTGTTC ATTTTTTTAG GGAAAATCTG TAGTAGCATC TGATACATTG AATCTAAAAT   300

TGATGTGAAT TTTTAAATGA AATACATGAA AAAATGAATT AAACGATACA AGGGGGATAT   360

AAATGTCAAT TGCCATTATT GCTGTAGGCT CAGAACTATT   400

    (2) INFORMATION FOR SEQ ID NO: 1587:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 561 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1587:

CAAAGCGTCT ATTATTGTTT GATTTTGATG AAACATATTT TAAACATAAT ACAAATGAAG   60

2003

AAGTGATCAC TGCTGTATTG ACAGGAAGTA CATTTCAAAG TGTCATGGAT AAaATGGATC   180

AAGTTAATAT GACGTTTAAA CCATTACATA TCTTTTCTGA TTTGAGTTCT AAAATGTTCA   240

CTTGGAATAA TGGCGAATAT GTTGAATCAG AAACATATAA AAAGAAAGTC TTGAGCGAAC   300

CATTTTTATT TGAAGATATT GAAGATATAT TACGTCATAT TTCTGCGCAA TATAATGTCG   360

AATTTATTCC ACAAAGAGCA TTTGAAGGTA ATGAAACACA TTATAATTTT TATTTTCATT   420

CAACAGGTAA TCACAACAAT GATAGTCGTA TCCTAGAAGC ACTnnTCAGA TACGCAAATG   480

ACCAAAACTA TACAGCGAGA TTTAGTCGAA GCAATCCATT AGCTGGTGAT CCTGAAAATG   540

CGTATGATAT TGACTTCACA C   561

(2) INFORMATION FOR SEQ ID NO: 1588:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 79 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1588:

CCAACAGTTT TATCATTATG GCAAGTTCTG TTAAACCTGC TGAGAGTTAT TTTGCACTGA   60

TTGCAAAACC AGAAATTGG   79

(2) INFORMATION FOR SEQ ID NO: 1589:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 73 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1589:

GCAGATATGC AGCAATTTAT AGAGGACTAG TAAACGCATA TATGACTTAC AGCTTTCAGA   60

CAAATAGCTT TGC   73

(2) INFORMATION FOR SEQ ID NO: 1590:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

TCATTTTATG GTTGATCATA GGCGTCGTCT TTTTCCTTGG GGATTTTATC TTTAAATACA   60

CAGATTGGCG C   71

(2) INFORMATION FOR SEQ ID NO: 1591:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 78 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1591:

ATACAATACA ATTCACACCA TATATGGATA AAATGCAAGA TGCAATTACT GCAGTTGCAC   60

AGTGCAAGTA GCAATACC   78

(2) INFORMATION FOR SEQ ID NO: 1592:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 168 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1592:

CCAATTAATT AAAAACCGGA AAACCAATTT TTTAAACCAA TTAAGTTAAA AATTTTTTAA   60

AATTGGGCCC CAAACCTTGG AAAAAGGTTT AATTTTCCTT TCCCAATTTT CCCAAAATTT   120

TTAAACCCAA AAATTCCCGG TTTTGGGTTA AATTTCCCTn GGTTAAAT   168

(2) INFORMATION FOR SEQ ID NO: 1593:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 117 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1593:

TGCTAGAAAG TATAGAACCT GGTTCAAACG CATGGTTTTA TGTCCCTTTT TAAACnGATG   60

TTTATTAAAA AAATATGGAA ATTGGCCACG TCCGCCAATT TCCTTAGAAA AGAACGT   117

(2) INFORMATION FOR SEQ ID NO: 1594:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 66 base pairs

    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1594:

AGACGAAGCC AAAAAGTTAT TCGCCAAATC TGAAATATTT TCAAAGACCT TAAAGGCGTA   60

AAATAC   66

(2) INFORMATION FOR SEQ ID NO: 1595:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 100 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1595:

ATTTTATTTA GGCCAATAAC TGnCTACTTC TGAAATAAGT TGCTTTGCAT AGTCTGACGC   60

GGGATGTTTG GATAATATCT TCTGTGTTAT TGCATTGCAA   100

(2) INFORMATION FOR SEQ ID NO: 1596:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 73 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1596:

GACCAGACGG CCGTAAACCT GGATGAAACC GTCCATTAGA TTCTGAAGTT GGTATTTTAC   60

CTAGAACGCA TGG   73

(2) INFORMATION FOR SEQ ID NO: 1597:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 66 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1597:

CTTTATAAAA TTGTCTTTGA CTAACAGGAT TTTCAACGCT ATTCACAAAC CATGGTTTAA   60

CATATT   66

      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 139 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1598:

TATGGCACCC TCTTTGATnT TGTGACCGTT TTTGGTAATT CACCATTATT GTACGAACCA   60

TGGAATTCGC TGCCTTCCTT TAGGCAATAA CATAATTATA TTTATCCCCT TCTTGTCACT   120

AGAGGTGCTG ACAACACCA   139

(2) INFORMATION FOR SEQ ID NO: 1599:

      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 101 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1599:

CTCCTCTGCA TGCACATCTT GTTGTAGCAA GGTTCACATG TAATTTATTA AATCGAAACT   60

CTATCCAACT ATGTTATAAA GTTCATTCTA AACAAATnAG T   101

(2) INFORMATION FOR SEQ ID NO: 1600:

      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 172 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1600:

TTGTACCAAG GTTCACATGT AATTTATTAA AGCGAAACGC GTATCCAACT ATGTTATAAA   60

GTTCATTCGT AAACAAATAA GTATAAAAAT TCAATATTTT TATTACTAGA ATATGGTTAA   120

ATACATTTAT TTCTTATAAn AATTTGATGT TTAAGATATT TTGCCAAATT GA   172

(2) INFORMATION FOR SEQ ID NO: 1601:

      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 112 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1601:

```
TTGGCACTGG CCGTCGTTTT ACAACGTCGT GCACTGGGAA AACCAAAnCA CGACGTTGTA          60

AAACGACGGC CAGTGCCAAG CTTGCATGCC TGCAGGTCGA CTCTAAGAAG GA                  112
```

(2) INFORMATION FOR SEQ ID NO: 1602:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 679 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1602:

```
TGCAATGGTT AATCATCTCA TATAACAACA CATAATTTGT ATCCTTAGGA GGAAAACAAC          60

ATGACAAAAC ATTATTTAAA CAGTAAGTAT CAATCAGAAC AACGTTCATC AGCTATGAAA         120

AAGATTACAA TGGGTACAGC ATCTATCATT TTAGGTTCCC TTGnATACAT AGGCGCAGAC         180

AGCCAACAAG TCAATGCGGC AACAGAAGCT ACGAACGCAA CTAATAATCA AAGCACACAA         240

GTTTCTCAAG CAACATCACA ACCAATTAAT TTCCAAGTGC AAAAAGATGG gCTCTTCAGA         300

GAAGTCACAC ATGGATGACT ATATGCAACA CCCTGGTAAA GTAaTTAAAC mAAATAATAA         360

ATATTATTTC CAAACCGTGT TAAACAATGC ATCATTCTGG AAAGAATACA AATTTTACAA         420

TGCAAACAAT CAAGAATTAG CAACAACTGT TGTTAACGAT AATAAAAAAG CGGATACTAG         480

AACAATCAAT GTTGCAGTTG AACCTGGATA TAAGAGCTTA ACTACTAAAG TACATATTGT         540

CGTGCCACAA ATTAATTACA ATCATAGATA TACTACGCAT TTGGAATTTG AAAAAGCAAT         600

TCCTACATTA GCTGACGCAG CAAAACCAAA CAATGTTAAA CCGGTTCAAC CAAAACCAGC         660

TCAACCTAAA ACACCTACT                                                    679
```

(2) INFORMATION FOR SEQ ID NO: 1603:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 85 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1603:

```
CATTTTAATT GATATAATTT AGACTTTAAC ATTTCATGCT GTTCACGGTT TTAATTTGAG          60

ACGTCATTTG GTATAACAAC TATAC                                              85
```

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 68 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1604:

ACTGGTGTGA ATAGCTCCAG CAATTTCTTT AACCGCGATC ATAATCAACG TCACCTTTTA   60

ATTTGCCA   68

(2) INFORMATION FOR SEQ ID NO: 1605:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 109 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1605:

TGGGGGGTnT TTTTGGGTTG GGTTAAAAAA AGGGAATTGG CCCAAGGGGG GAATTCCCTT   60

AAAAAAACCC CCAACCCCCT TGGGAAATTA AAAATTGGGT TAACCGGGA   109

(2) INFORMATION FOR SEQ ID NO: 1606:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 112 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1606:

GCTTATATAC ATGTTCCATT ATAAAAGGAG TACGAACGAA AGTAACGCAT GACGTTAATT   60

TAAAAATATT GTAATAATTA TGGATTAAAT TTAAAACCAn GGGGTATTCC AT   112

(2) INFORMATION FOR SEQ ID NO: 1607:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 106 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1607:

GTTCAAGTTG GTAACCTAAC AACACGnAAT TAGTTTAAAC GTTTGG   106

(2) INFORMATION FOR SEQ ID NO: 1608:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 83 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1608:

CACACTGATA CCATAGGATT TATGATAGAT CAACAGCATG ACCAAATGTA TGACCTAAAT   60

TTAAAAATTT ACGTACACCT TGT   83

(2) INFORMATION FOR SEQ ID NO: 1609:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 132 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1609:

AAAAGAATAA AGTCACTGAA CAATGGTCTT TCACAATGAT GTTGCGTCAA TGCACAAGCG   60

CATTATGTnT GTGACTTGGG CATTTTGGCT TATCAGCTGA ATATTATACG CATTTACATC   120

CCAATTAACG TA   132

(2) INFORMATION FOR SEQ ID NO: 1610:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 107 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1610:

TTTAATGCAT ACGCTTCTCG CTTAGCAATT TCTTTGCACG TCTAACAAGC ATTAACGCTC   60

TTAnTACTAT AATCACAACA AAACCAGCGA AATATAACAT GCGTATA   107

(2) INFORMATION FOR SEQ ID NO: 1611:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 84 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1611:

TTCGCACCTG GTATCGTTCA AACCACCAAT GATGGCCCGT CTCGCCGTGG CAACAGCCGA   60

AGACCGCAGG TAAACCCTGA ACGC   84

(2) INFORMATION FOR SEQ ID NO: 1612:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 127 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1612:

ACTCACATGT ACGATAACAC CCTTCGTAAA TCCATCTTTG GTTTGCCAAG TTCGTCGTTG   60

TAAACTGTCT ATACTCGTTA AACCGCTACA TGTTTTCCTA AAnCCTGTGC CTAAATGCTT   120

TACTGAA   127

(2) INFORMATION FOR SEQ ID NO: 1613:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 129 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1613:

CGTTCAACTT TTTCAATTTC TAACGGCGTT TTACTATCTT TATCTGTAAC TAATTCAACT   60

CCAAACATTA AGCCTCGTCC TCTTACATCA CCAACATTTC GATGACGCTT CAGCGCATGT   120

AACTGTTTC   129

(2) INFORMATION FOR SEQ ID NO: 1614:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 348 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1614:

nCAACTAGTG GATTTAAnAT AnACATAATT ATAAATGCAA ATGCTAATAG CTGAATACCC   60

GCACTAGGTG CATAATTTGT GTATTGAGCA AATAAAGCTA ATACAATGAT TGTAATTCCT   180

TTAATGACAA ATAAAGGTAA ATTTAATCGT TTTAAAGGTT GGTAAATTAA AAATACAATT   240

GCAGCTATAT GCGAGCCACT AACTGCCAGC AAATGATATA TACCTATCTC TTTAACACGT   300

TCCTTAAATT GCTCATTAAC TTCTTTTACG TCACCAGTAA TCAATGCC   348

(2) INFORMATION FOR SEQ ID NO: 1615:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 72 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1615:

GAGCTCCACC GCGGTGTCGC CCGCTCTAGA ACTACTGGAT CCCCCGGGCT GCAGGAATTC   60

GGCACAGCAT AT   72

(2) INFORMATION FOR SEQ ID NO: 1616:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 63 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1616:

CATCACGTTA AATCATAACG CGTGACGTGC TTTTGCTATT TGTCTCTCGG TATCTCTATA   60

TCT   63

(2) INFORMATION FOR SEQ ID NO: 1617:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 113 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1617:

ATTGAATTCA AGGGTGGAAC TCATGAATTG GCTGGAAAAA GGTAGATTTA ACTGGATGGT   60

TGnAGCCATA TATCGGTGCG TTTATTTATT TGGTATTTTA AAAATCAACC TCG   113

(2) INFORMATION FOR SEQ ID NO: 1618:

                (A) LENGTH: 80 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1618:

GTACAATAAA GTGGTAAACA ACATGCCAAT GGAAAAAGGG ATTAAAGGTG TTTATGTCAT   60

TCTTAAAGAT AGTAACGGTA   80

(2) INFORMATION FOR SEQ ID NO: 1619:

        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 117 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1619:

ATCTTATGTT TTTTTCCTAA AACTTCTGCT ACTTCATTTA TTTGATGTAT GGTAGATAAT   60

TCTGTTTGGA TACTCATATC AACTTTTTCT ATCATATCTG AAATCTCTTT TnTGGCA   117

(2) INFORMATION FOR SEQ ID NO: 1620:

        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 107 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1620:

CGATAAACCC TTCGTAATCA ATCTTTGGTT TGCCAAGTTC GTCGTTGTAA CAGTCTATAT   60

CGTTAAAAGC TACATGnTTT CCTAAGCCTG TGCCTAATGC TTTACTG   107

(2) INFORMATION FOR SEQ ID NO: 1621:

        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 63 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1621:

AATATCGTGT CTCTGTCCAG TGCTGTCCAA TCAATTTTGA TCCACCGATT GTCATACGTA   60

(2) INFORMATION FOR SEQ ID NO: 1622:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 75 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1622:

ACCATCTGAC ATCATCAATT ATGAATTAAT GATGATATTA AAAATAAATT TGAAACATTG   60

CCAATTGATA GTGCC   75

(2) INFORMATION FOR SEQ ID NO: 1623:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 78 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1623:

TACCTGTGTA TCAGCTCTAT TAACAACCTA ACATATGTGA ATAATTTGCG ATCCTTGTTG   60

ATAATGCTGT AATTTGAC   78

(2) INFORMATION FOR SEQ ID NO: 1624:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 95 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1624:

GCAAGCTTTT GCGGCTTCTG ATGCACCATT AACTTCTGTA ATTAAACACA CAAAGTGAAA   60

CAGGTAGGTA ATGCAAAACT GCAACGGACA ATCGA   95

(2) INFORMATION FOR SEQ ID NO: 1625:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 76 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

ATTGCGATTA CACAGTAGTG AATGAGATAT TTGACATGAA AGCTCCTGCA GCTTCTAAAG   60

AAGAGTTAGC AGGTTT   76

(2) INFORMATION FOR SEQ ID NO: 1626:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 126 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1626:

AAAAGCTAAA AAAGATTATC AGGTGTATCA CAAACTCAAA TTCTCATTAC CATTTATCTC   60

AGTGTGAACG TCTTAATTGA GAACTAATCT nAATTGAGAT ATTAGTCATA TAAGGATGGA   120

CAAGCA   126

(2) INFORMATION FOR SEQ ID NO: 1627:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 116 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1627:

TGATACGATA GAACATAGTT CAGCACATTG TTTGTTGAAA TTGGATATTA CCGCCATTTT   60

TTCACAATAT CAATAATACC TGAACGTGTT GGTTnTTCCA CATTATGATT GTACAT   116

(2) INFORMATION FOR SEQ ID NO: 1628:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 91 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1628:

ATTTTGTCCT ATCTTGAACA AATCCGATTT TTCTCAGACA CTGAATCCAA AGTATTCATG   60

TACCATAAAC CATCTGCATG TTGATTTATG C   91

(2) INFORMATION FOR SEQ ID NO: 1629:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs

        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1629:

ACAGAAAGTC AAACAGTAAA AGCGGCAGAA TCAACTCAAG GTCAACACAA TTATAAATCG   60

TTAAAATACT ACTATAGCAA GCCAAGTATA GAGTTAAAAA ATCTTGATGG TTTGTATAGA   120

CAGAAAGTGA CAGATAAAGG AGTATATGTT TGGAAGGATC GAAAAGATTA TTTTGTTGGC   180

TTGCTTGGTA AAGATATTGA AAAATACCCT CAAGGTGAGC ATGATAAGCA AGATGCATTT   240

TTAGTCATCG AGGAGGAAAC TGTTAATGGA AGACAATATT CAATTGGTGG TTTAAGTAAG   300

ACAAATAGTA AAGAATTTAG TAAAGAAGTC GATGTTAAAG TAACAAGAAA AATTGATGAA   360

TCATCGGAAA AGTCTAAAGA TAGTAAATTT AAAATTACTA   400

(2) INFORMATION FOR SEQ ID NO: 1630:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1630:

GCTTTCCTTT TCGAAATCTA TAAATCTAAT CCATTGAAGT AAACTAATTA TGATAATTAT   60

TAATTCTATA ATTGTnGTTA TCTTTAAATA ATTTGGAAAC CTTTCATAAT CTAAACCAAA   120

AAAGAAAGTT AGACATGAAA AAAGTATCAT AAATAATGAT GCTAAACTTA AGGCTTGTGC   180

ACCTGGCTTT CGAAGAATGT CTATATTTTC CTTAGTAGTC ATATTTACCT ATCTCCTATA   240

CATTGATTTT GTAATAGCAT ATTAAGTATT TAAAGTTATA AGTACTTAGA TTCTTTTCGA   300

TTAAAAGTAT AAAAGCCTAA AATTATCTTT ATATTATTAT TTGATGACAA CTTTATGGTC   360

TCTATTGTTT TTTACTTAAA CGCTAAAAAG CTAnACAAAG   400

(2) INFORMATION FOR SEQ ID NO: 1631:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 70 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1631:

TCTAGAGCGA   70

(2) INFORMATION FOR SEQ ID NO: 1632:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 62 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1632:

CAACGAAGAT ATTCAAGTGT TCAGTCATTA TTTTTGACTG CTAATGAAAC TGATTCTTGT   60

GG   62

(2) INFORMATION FOR SEQ ID NO:. 1633:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 81 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1633:

CTAATGATTA GATTCAAACT AATAAAGACT ACAAAAACAA GTTGATAATG GTAAAGATAT   60

TATCCAACTT GACATCTAAA G   81

(2) INFORMATION FOR SEQ ID NO: 1634:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 63 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1634:

AATTTCACCT TTGTCTAGTA ATTTATTTGT GTAGTGTAAT CATTAATTGT TTTAATATCT   60

AGT   63

(2) INFORMATION FOR SEQ ID NO: 1635:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 579 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1635:

```
ACCAACTAGC TAAATGCCAG CGCGGnATCC ATCTCAnAAG TGCACAGCAA GACCGTCTTT          60
CCAACTTTTG AACCATGCGG TTCAAAATAT TATCCGGTAT TnAGCTACGG TTTCCCGAAG         120
TTATCCCAGT CTTATAGGTA GGTTATCCCC AGTGTTACTC ACCCGTCCGC CGCTAACATC         180
cAGAGAAGCA AGCTTCTCGT CCGTTCGCTC GACTTGCATG TATTaGGCAc GCCGCCAGCG         240
TTCATCCTGA GCCAGGATCA AACTCTCCAT AAAAATTATG ATGTTTGATT AGCTCATAAA         300
TACTAAATAA TGTTTGTAAC TAATAGTTAC GTTTTTGGAA TTAACGTTGA CATATTGTCA         360
TTCAGTTTTC AATGTTCATT AATGTTCAAT CTCTTTTATT CTACTTCATT TATTTCTTGA         420
AGTCAATAAC TTTTTGAACG ATTACTTTAT TTATTCTATA TTGTTTTTAT AGTTATTTCA         480
ATGGtAAGTn TTACACTTTT GaaATTCTTC TTTAAAAACA ACTGCGTCGt TTTTGaCGcT         540
TTATCaTATT ATCmACTTTG GGaATTTAAA GTCAATAAC                                579
```

(2) INFORMATION FOR SEQ ID NO: 1636:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 69 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1636:

```
TCGACATTAA GCAACGTTCT TCGCAAAAGG TAGCGAGCGA CACGAGTTAA CTTTGCACGT          60
TTCATTATT                                                                 69
```

(2) INFORMATION FOR SEQ ID NO: 1637:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 116 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1637:

```
CTGTGACTTC GTCGCGATGA CCTTCGCCGT TGTTCTCATG GTAAGCTTTA AGTATCGTCG          60
ATGCAGTCnG TTCGCCATGT GCGCCAGCAG ACTGGTTGTA ATGTCGCCTC GTCCGT            116
```

(2) INFORMATION FOR SEQ ID NO: 1638:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs

```
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

```
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1638:

ACAACATTTA GGTACTTTCA CGCATATCAC TACAGCTCAA CGTGATGATT TACCAAATCA      60

AATTTCACAA G                                                           71

(2) INFORMATION FOR SEQ ID NO: 1639:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 73 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1639:

GCGTGGCTTT GTGATTAACA TTGACAAGCA CGTGCAACAA CATATTCGAC GCGATAAAGC      60

GACATCTAAT ATT                                                         73

(2) INFORMATION FOR SEQ ID NO: 1640:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1640:

CGCGATCATT TTCATTTCTA ATTAATCTTC CAAGTCCTTG TCTAAAACGT GTAACTGCAT      60

CAGGTAATAC ATATTCCTTG AAAGTTGAAG TGAATTCAGA ATCCATAAGC CAATATTTTG     120

CATTATGCTT GTTCATAAAC GGTAACTTCG CTATCATCAC ACATTTAATA CCATTTGCTT     180

GAAAATCAAA ACCTTCAAAA AATGTTGACG TACCAAGCAG TATGGCCTTA TCAAAATTAT     240

TAAACTGTTG TACTATTTTA TAATTTTGGT TCTGCTGTTG TGTTAATACA ACATAATCTT     300

CAAATTCTGG CAATTCATTT AAGCATATCT TGTACCATAT GCATCATTTT ATAACTCGTA     360

AATAAGACTA AACATTTTGA TGACGTTATA GTCGTATATn                           400

(2) INFORMATION FOR SEQ ID NO: 1641:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 66 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1641:

```
ATTGTTGTAC CATGTATACT AACAATTGTA ATGTCTCATT TCAGTAAACA AAAAGCGAAA        60

GACATT                                                                   66
```

(2) INFORMATION FOR SEQ ID NO: 1642:

  (i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 400 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1642:

```
ATTTCGTCGG GAATAAATTT TGCCATTACA TAGAAATATC TAATAGATAA CGAAAAAGTA       60

TCGTATGTAT TTTTAATATA GTGTAAAATA TTATATGTAA AATAAAATGT AGGTTTTTAG      120

TTAGAGGCAT TATAAGAnAA TTTTGAGTAT AGGTTAGCTT TTAATTATGA ATCTTATTGA      180

AATTTGATTA ATAAAAATAT GATAGGGGAT TAAAATGAAA CTATTTTATA TCGTATTTCT      240

TATTATTATA TGGCTGAATA TATTTTTAGG AAATGAAATC ATCCATACAC TGACTGTTTT      300

AATAACAACA TTGTATATTG TTAATTCACG AnAGGGGATT AAAAATGACA GAGTTGAATA      360

ATATTATAAA CGCGCnTGCA ATCnTTGTTT GAGTCCGGAA                            400
```

(2) INFORMATION FOR SEQ ID NO: 1643:

  (i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 66 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1643:

```
AACTAGAGGA GGACATCCTA ATGGAAGCAA AACCCGTTGC TAGAACAATA AGAATCGCAC        60

CTCGTA                                                                   66
```

(2) INFORMATION FOR SEQ ID NO: 1644:

  (i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 75 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1644:

TATCAATTTC ATATGCGATT TGGCCTTGCA ATAATTAGGT CTCACCTTGC CATATCTTTA   60

CCTAAGCAAT ACTTG   75

(2) INFORMATION FOR SEQ ID NO: 1645:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 70 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1645:

CATTCTCCTG CATCATAAAA ATCAACAATT GTATCATCAA AGTGTATCAA AATATTTTAA   60

TATCCCAATT   70

(2) INFORMATION FOR SEQ ID NO: 1646:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 73 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1646:

AGTGACACTT TCGTTCCACC ACATCGTAAA GAAGTACTTC AAGCACGTGA AGATGACATC   60

AAAGAAAAAG TTG   73

(2) INFORMATION FOR SEQ ID NO: 1647:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 71 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1647:

CTGTGATTGG TGTTGTGATT GTCTTGCTTC CTGGTTGTCC TTCTTGTTTC GCTCGCTCTT   60

CGCCGGGTTG T   71

(2) INFORMATION FOR SEQ ID NO: 1648:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 115 base pairs

        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1648:

AACTATAGAA AAAATTCGGAA TTATACCAGA AATGGAATAT GAAATGGAAG AGGTTAAACA   60

AAnCGAGCAA TATATTAGAG AGCAAGAAGA AGCTGGAACA ATAGAGGCGA TAACA   115

    (2) INFORMATION FOR SEQ ID NO: 1649:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 59 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1649:

TGTTGTCATG ATCTGAAAAG TCAAAGTCAA TAGAACATTG GCTTTGGCTT TTTATTTGG   59

    (2) INFORMATION FOR SEQ ID NO: 1650:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 125 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1650:

ACCGATAATA GTACACGGCA TAATGnAACA ACTTGGCATG CACCCTTTTT ACGTTCCTTT   60

ATCTCTGCAT GATTGTCATG TTCATCATGG TTTGGCTTGC ATTAATAGAG AGGGTTGACG   120

CAGAA   125

    (2) INFORMATION FOR SEQ ID NO: 1651:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 71 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1651:

TGATTAACGC GAATGCCACT TTTACTACCA ATGTTCCCAA AGCTGCTTCT GACAAACGCC   60

ATTGTACTCT G   71

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 60 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1652:

TCACTACATG CACCATAAAT ACAGTATGAA CGTATTGAAA TGGGCATTAC ATGATACAGA   60

(2) INFORMATION FOR SEQ ID NO: 1653:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 123 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1653:

TTAATTGAAA CAATTGACAA ATGCAATTTG ACGCCAAACT TTGAACTTTG AATGGATTAT   60

CACATTATGA TTGTTCATCC ATGGnCAATT AGCATGGACG TATTACATTC TGGATTATCA   120

AGC   123

(2) INFORMATION FOR SEQ ID NO: 1654:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 76 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1654:

CTATGACGTC GCATGCACGC GTAACTTGGG CCCCTCGAGG GATCCTCTAG AGCGGCCGCC   60

CTTTTTTTTT TTTTTT   76

(2) INFORMATION FOR SEQ ID NO: 1655:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 145 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1655:

TTTTAAATTT TCGTGAAATC GGAAATGTAC GATTAGTTAT TAAGCGTTAG AATGTGTGAT   120

ATGTGAACCT GGTATTGACG GCGCT   145

5

(2) INFORMATION FOR SEQ ID NO: 1656:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 73 base pairs
        (B) TYPE: nucleic acid

10

        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

15

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1656:

TTTAGAATTC CAATACGCTA TTGCCAGCGA TTTAGCCACT TGTGGGTAAT GATATTGAAG   60

GTGTTAGTCA AGT   73

20

(2) INFORMATION FOR SEQ ID NO: 1657:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 93 base pairs
        (B) TYPE: nucleic acid

25

        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

30

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1657:

CTTCTGAAAA GTAGTAATGT AACCTATTGG ATGCGAATGA ATCCCCAAAT TTAGTGGACG   60

TATGTGGCTT CATCTTCAGA ACCTGTATCT GGT   93

35

(2) INFORMATION FOR SEQ ID NO: 1658:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

40

        (D) TOPOLOGY: linear

45

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1658:

AAGTTAACAT GCAAGTTGAC GATGTAATGA CTCAAAAAGA GTGGAAACAA AAACACGA   58

(2) INFORMATION FOR SEQ ID NO: 1659:

50

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 65 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1659:

TTAATCCCAC AAACAAATGT ATGAAATTGA GTCAGTGATA TTAAATATGG GCTTGAAAGT   60

GTCTA   65

(2) INFORMATION FOR SEQ ID NO: 1660:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 91 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1660:

TGCATTTTTG TAAGAACGCA AAGCATTGTA AATTAGTTTT TATAAATTAG GATATTATCA   60

TGTGTATTGA AAACAATGAA GTGTGCTATG A   91

(2) INFORMATION FOR SEQ ID NO: 1661:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1661:

ACATATCTGT CCACACAACA AGGACCATTT GTCTGAAGGG ACAGTGAGTG GGGAATATGT   60

(2) INFORMATION FOR SEQ ID NO: 1662:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 169 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1662:

TGGGGTTTTA ACCAGGGGAC CTAAAACCAG CCCCCATTTT CCAAGTTTGG ACCCCAAATT   60

CCCnAAATTT AAAAAAAATT TGTTTGGGGT CTAACTTGGG CCGGTGCCTT CCTGCCTAAA   120

TTTAGCCCAT GTCTAACATA GTACTTTGGG AACGTAAAAG TTTAATTTA   169

(2) INFORMATION FOR SEQ ID NO: 1663:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 677 base pairs

      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1663:

TGGCACAATT GCACCAATTA AATGAATAAC TTTATCATTT TTATATACAG GTACAACAAT   60

CGCTTCTTTT ACGAACTCAG ACTGGCGTAA TTGTGTTTCA ATTTCTTCTA ATTCCATTCT   120

GTAGCCATTC AATTTGATTT GGAAATCAAT ACGACCTTGA ATGAACCATT GACCATTTTC   180

AAACTTCGCT TTATCACCAG TGTGATATGT ACGAATACCG TCATCGAAAT TAAATACTTC   240

AGCTGTTTTT TGGTCATTTT TTAAGTATCC TAAACTTACA CTTTGACCTT CGATAACAAG   300

TTCACCTTCA TCTGTAGTAG ATAATCTTGC GCCTGGTCTT TCAACGCCAA CAGGTAATGT   360

CGGATATTGA TCTAAGATTT CTTGTGTAAT TTGAATACTT GTAACTGCTA CCGTAGCTTC   420

AGTTGGACCA TATGTGTTGT AAATCGTCGC ACTTGGGAAA CGGTTTACTA ACGCTTTTGC   480

TGCTCTGTGA GGTAGAATTT CACCACAGAA GAAGAATTCG TTAAGACTAC CATATTGTTC   540

TTCATTAAGC GTTGGTAATA ATAAACACAT TTCCATAAAT GATGGTGTTG ATACCCAAAT   600

GTTAATCGGT GTTGCTGTTA GCATTTCATT TAATAATTTA GGTTTATTAA TCATGTTTTT   660

ATCTACAAGA nTnAAnG   677

(2) INFORMATION FOR SEQ ID NO: 1664:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 62 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1664:

GTTACAACAA TAGTGGTATA AAACGGGAGC AATTAGAGAT CAATATATGA TTATTAAGAG   60

CA   62

(2) INFORMATION FOR SEQ ID NO: 1665:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 342 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1665:

```
GTTTACGCAA ATGATAGCTC GGTAAAACAT GAGCAACATG TTGAAGCCAA TTTGGAAATG        120

TGTTTATCGG AAACCACAAT CCACCTAATA CTGCTAAACC AATTGTTACG ATATTAGCTA        180

AAGCACTTGT TTTTTGAATA TCATTTAACA AAGAACCATA ATATGCCAAA AGTTATTAAT        240

AGAGACGCAC CTAACCATAA AAATATTCCT GACTCTAACC ATTGAACTGC ACTCATTGCA        300

ACACCTTTAT AAAAATGTCC AACCATAAAA ATAACTAATA TC                           342
```

(2) INFORMATION FOR SEQ ID NO: 1666:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 102 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1666:

```
GTCCAAGAAT TCAAAAACGT TTTCAACTTC GGCCAAAGCC CAATTTnTCT TTGTGGTTTA         60

ACTTTTTAAT TTTGAACGTT TTAGGGCATA AAAAAAAAAA GG                          102
```

(2) INFORMATION FOR SEQ ID NO: 1667:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 122 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1667:

```
TTGATAGTAG CCATAATCAT ACCACTTAAA TAATATGTTT GATCATCGGC ATAATTTTTA         60

TTTATTGTCt GTTCGCAATA TTTTGAGCAT TATCATAATT ACCACTAGTC ATATCATCTT        120

TG                                                                     122
```

(2) INFORMATION FOR SEQ ID NO: 1668:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1668:

```
AGAGATGAAA TTAAAATCGC AATTGAAAAT TTCAAATCAC GATGAGAGTG GGACAGA           57
```

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 70 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1669:

AACTACTGCC AATATTAATA GCATTGGTAC ATCTTAGAGG CATTGAATTC CTTACTCAGA   60

CTCATAATGC   70

(2) INFORMATION FOR SEQ ID NO: 1670:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 73 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1670:

TTGTCTGATA TAATCCATTT CGATTGGACT CCACACGTTA CACCGATACC TTCTTTACCA   60

GCCCGACCCG TAC   73

(2) INFORMATION FOR SEQ ID NO: 1671:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 140 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1671:

GAAGAATTGT ACTGTTAAAG TGACTCTAAA CTATCGCGGA AATAACAGTG AAATCACCAA   60

TTAGACTAGC GACACTGAAG TCATTAAAAA CAGACATTTG TAGTGGTGCn CTTATCACCG   120

CAAATACAAG AGAGTTTCTC   140

(2) INFORMATION FOR SEQ ID NO: 1672:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

AACAACGTTT ACTATTGGCA CAGAACGGTT GGTACTTAGT CTAATACCAT TGTCATCAA   59

(2) INFORMATION FOR SEQ ID NO: 1673:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 124 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1673:

ATCTCTTTGA CTTGAAGGAT TGGATTTAAA TCTTGGTGAT TTGGGCCGTG AAATATTTCC   60

AGAAAATTCC TCAGACGTAT TAGTATAATT GTAACGnTAC ATTCTAATAT ACCTTTCTTC   120

GATG   124

(2) INFORMATION FOR SEQ ID NO: 1674:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 109 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1674:

CACCACCACC ACACACACAC ACACAAACAC ACAACCCCCC CACACACAAA CCACACCACC   60

AACACACCAA CACAnCACAA AAACCCACCA CACACACCAC ACACCAACC   109

(2) INFORMATION FOR SEQ ID NO: 1675:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 101 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1675:

TnGTCAACTG ATTTATGAAA TGGCAGAGCA TATGGCGTCA AAGGTTCTTA ATCGTTAAGC   60

CAGACCACTG GAGGACCATT AGATGCAGCG TTGCTTTCAA G   101

(2) INFORMATION FOR SEQ ID NO: 1676:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1676:

```
TTTTTAAAAT TTGnAAATTT TAGACCTTAT TTCACGTGCG ATTTAATCGA TGTGTTAATA      60

AAACAATACT GGCATTCAAC ATGTAATCCG ATAATAAAAT AAGGTTGCAA TTATGTTATT     120

GCATATTTTG TTTATTACTT AGAATAATAC GATGGTTAAG ATGAAATATA TGACAAAGAT     180

AAATAATGAC ATTAAATTCA AGATGTTTAC GCCTTTTAGA TCTTTTTTAA GCATTTTAAA     240

TCCTGTCACT TCkACATTAC CGACTAAGAG TAATAAGACG ATAAATACCC ACCAATTsTC     300

TTTTGGAAAA CTCATCGTCG TTAATGCTAA GACGAATAAT AACAACACAC CCATAATAAT     360

TCTCAAAATG CGAGTAAATA CAACTTCCAT TTTAAAAATA                           400
```

(2) INFORMATION FOR SEQ ID NO: 1677:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1677:

```
TCTTACTCAT GCATATGAGT GCAAGGGCCT GAGCATTCAT CAGCAAGATT AGAGCGATTT      60

TTAC                                                                  64
```

(2) INFORMATION FOR SEQ ID NO: 1678:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 65 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1678:

```
ACAGCTGATT TATTAAATGA TACTAAGTCC AAAGGCATGC GCATTATATC AGTTGGTACA      60

TTTCA                                                                 65
```

(2) INFORMATION FOR SEQ ID NO: 1679:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 362 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1679:

AGCGCCACCA	ACTGACGAAT	TAGGTGGTAG	TTGGACACTA	TGGAAAAATT	TAGCGCGACA	60
AAGTCCTGAA	TTTGGTAATC	CTGATAAGTT	TTGCCAAAAT	ATTCCTAnAA	AAAGTTGGTT	120
TGTTTCAGCA	ACTTCTACAA	CAAACAATAA	AGAGATTATC	GATACAATAG	AAAGTATTTG	180
TAAACGTGAC	CCACTTGGCA	GGCAAAACAG	TTACAGGCGG	TATTATTACA	ATCAATGATT	240
CTGcATGGCA	AATGAGTTTT	ACAATCAATC	GTGCAGCAAC	AGTTTGAAAG	ACCAACCTGG	300
AAAATGGAAA	TATCTACATG	GGGTTTGATG	CCTTATGATT	CnGGnGTAAA	CGGCGGTTGA	360
TG						362

(2) INFORMATION FOR SEQ ID NO: 1680:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 69 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1680:

AGATACTTCA	GATTTAGCAT	CATGAAGCAA	CTTTAAAAGC	AATCGCTGAC	GCTGGTATTC	60
AGCCCGAGG						69

(2) INFORMATION FOR SEQ ID NO: 1681:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1681:

TAACCATTTC	TTTTGACGTT	TTATGTTGTT	TTAAGAAATA	AATACCAGTT	AATGTA	56

(2) INFORMATION FOR SEQ ID NO: 1682:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1682:

(2) INFORMATION FOR SEQ ID NO: 1683:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 109 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1683:

CCCCAACACA ACAAACAACA CACCCACCAC CCAACCCCAC CACACCCACC CACCACCCCA   60

ACCCACCACA ACACCACnCA CCAACACACA CCACACAACA ACCCCACAC   109

(2) INFORMATION FOR SEQ ID NO: 1684:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1684:

ATTATGTTCG CGATAATTTA AGTAAAAGAA GCACAGATAT TGAATTTGAT AGGAGTAATT   60

GT   62

(2) INFORMATION FOR SEQ ID NO: 1685:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1685:

CATAAGGTAC TTAAATTAAG GCATATCTGC TGTCTAGCAG TCGCATAAAT CATTAGA   57

(2) INFORMATION FOR SEQ ID NO: 1686:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1686:

(2) INFORMATION FOR SEQ ID NO: 1687:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 110 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1687:

CTTTATAGTA TATTGCTTTT TGTTTTTCTT TTTCGTCATA TTTCACTTTT AAATAGATAC   60

CTGCAACACT AATTAATATG ATTAACATAA TACTAGTTAA TATTAAnATT   110

(2) INFORMATION FOR SEQ ID NO: 1688:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 214 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1688:

AATTACTAGT CTGCTTGTCC AAAGATTATT TATATTCTAG CTCAACATTA ATTTCTTTGA   60

TTTTGGTACC ATCTATCGTG TCACCCATGC GATGCGGTTG TAGTTTTTTT GTAAGTTCGA   120

AAGTATAAAA CTTATCATCT TCCATTTTAA CTACAATTTT ACCTTTTCTA TTATTAACAG   180

CACCATATAA TTTTTCTTCT TCCATCAATT TTTT   214

(2) INFORMATION FOR SEQ ID NO: 1689:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1689:

GCTAGTTGTA ACGTGCTTTT TCACCACCAG ATAAATCATA ATATCTTTTA ACATCTCTG   59

(2) INFORMATION FOR SEQ ID NO: 1690:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1690:

CCAAACTTTA TAATATGAAA TGCTTGGTAA TTACAAAGAT AAAATCATAC TCACG   55

(2) INFORMATION FOR SEQ ID NO: 1691:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1691:

TAGACAGCAA TCCATTGCTA TAGGGGTGGA TATCTCATTT GCGTTTGGAG CTGTGCTTGT   60

TATG   64

(2) INFORMATION FOR SEQ ID NO: 1692:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1692:

TGCATGGGAT TGCAGCTAAG AGAATCATAA AAATATATTA CTTTAATAAG TGTAGTA   57

(2) INFORMATION FOR SEQ ID NO: 1693:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 74 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1693:

CGATGTGTAC GTCTCACCTG ATTTCGCACG GTAAGCTAGT GCATATTCAG CACCGCTACT   60

CGCCCAGCCT AGAC   74

(2) INFORMATION FOR SEQ ID NO: 1694:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 162 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1694:

AACTTTTCAG ATGTTGATAG CTATAGATTT AGGCGCTATT CACCAnGTCT ACATGCAATA   60

CGTACGTTAT AATGCACTGC AACGAATCGC GCGTTATGAG TTGGTAATTG TTGTTCAATA   120

TTGGGTGTAT AGTTTTCAAC GTGGTTACAA GCAACTACCT AA   162

(2) INFORMATION FOR SEQ ID NO: 1695:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1695:

AATTATCTCT ACACCTTTTC TTTCACATAA TTGACGCAAT ATAATCCCTA TATCT   55

(2) INFORMATION FOR SEQ ID NO: 1696:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1696:

ATGCAACGTT GGCATTGGGA AATGGTCCTG CCTAAATTAA CACGCAATAA AATGTG   56

(2) INFORMATION FOR SEQ ID NO: 1697:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1697:

ACTGTGTAGA AGATGCTATT ATTGTAAAAC ATAGTTTTAA TTTTATTTTC TGATATA   57

(2) INFORMATION FOR SEQ ID NO: 1698:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 109 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1698:

AAAATTTTCC CCCGGGAACC CGGTTTTTTA AACCCCCCGT TTTAAAAAAA TTTTGGGGGG   60

CCCAAAATTT CCCAAAAAAA nAAAAAATTT TTTTTTTCCC GGGGAAAAA   109

(2) INFORMATION FOR SEQ ID NO: 1699:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 100 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1699:

GTGTTAACGT GGATTATATC AAnGAGGCGG TCAGGTACAG TCCACACGCA CAGCGCACAG   60

AAGTATCACA TCCAGTAAAC AAGGCTAGTA CAGCATTGCA   100

(2) INFORMATION FOR SEQ ID NO: 1700:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 129 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1700:

AAGGTTAAAT GAATTAGGTT GATCAATGCT CTATACTCAT TGCTAAGTCA ACGCACCTTT   60

ACCACCTTTT CCCAACTCAG TAAGGCATTC GACGTATTTC TTAGCCAAGn TTACATATCT   120

ACTCTGCAC   129

(2) INFORMATION FOR SEQ ID NO: 1701:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 63 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1701:

CAAGAGGAAC AACTCGGTAC TGCGCATCAG CAGAGATGGC GAAATCACAC TTAGAAGACA   60

AGG   63

(2) INFORMATION FOR SEQ ID NO: 1702:

        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1702:

TATTTAATAA ATCTTCAATA CCTTGTTCAT CAGTTTGTTG ATAAATAAGA CCTCTCCATT   60

TTAAATCTTC AATTAATACA TTCGTCATTA TTATTTCCTC CTATTTATAA TTATTTATTG   120

AATACTTGTT AAAATACTTT AAAGkTTTTT GAACGTAAAA AAAACCCTTA CAACAAATAT   180

GTAAGGGCGC GATTGCACGT TACCACCAAA CTTAAACATA ATCATAAGAT AATGTTCACT   240

CTATTAATGA TACGTTCATT AATAAACGTA GGACATGTTA GTTATAAAGG TGTATTCATA   300

TTATTAAAAA CACTAGTTCA CAGCGACCAC TAGCTCTCTG ATGATTTCAA ATAATATTAC   360

TTGTCCTTTT ATCCTATTCT GTATGCATTT TCCCTAATTA   400

(2) INFORMATION FOR SEQ ID NO: 1703:

        (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 208 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1703:

TCAATATTGA TATCGAAACG CTTTGCAGAT TGATATAAAT TATCAGAATC AAGTAATTCA   60

TTTATTTTCT TTGGTGAAAG TACTTGGAAA ATACTATACT GATGAAAACT TAAAAATGAA   120

ATGAAGTATG GAAGTTGTTG CTTTGGGTAA GCnAAATTTC TAATACATAC TGATTAAACT   180

GTTTGTTTAT TGnGAATTGC AACGCATC   208

(2) INFORMATION FOR SEQ ID NO: 1704:

        (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 67 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1704:

AAGCCGATGT AATTATTTAT GCAACACCTG TTCTAATGCA CAAAGAAATA TCTTAGCGAG   60

CTTATAG   67

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 54 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1705:

CCAACTTGCA TGTTATTTTA AGCTGACTTT CCACCAACTT CTGAGTTTGT GGCC   54

(2) INFORMATION FOR SEQ ID NO: 1706:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1706:

CAACTACACG AAAGGGTAGT GCTTCAAGAT AATAACGTCC AATTATTAGG AACTGTGGCG   60

A   61

(2) INFORMATION FOR SEQ ID NO: 1707:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1707:

ACCATTCCAA ATGAACCTAA ACCACTTGAT ACGTTGACGA CAACAGGTTG TTCA   54

(2) INFORMATION FOR SEQ ID NO: 1708:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1708:

AAATTTGAAT AACTGTACAC ATTTTTTTGA TCATAGTCTA TATACTTTGT GAATTAATT   59

(2) INFORMATION FOR SEQ ID NO: 1709:

       (A) LENGTH: 59 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

5

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1709:

10
GCACAATAGC CAATTAGATG GGGCCGGTGC GGTAACATTT TGCTTCATTC CTGCATTAT   59

(2) INFORMATION FOR SEQ ID NO: 1710:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 55 base pairs
15
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

20

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1710:

TTACAATTCA ATCAAGTTCT TCATTATCAG ACGAAGAAAT CCACCGTATG GTAAA   55

25
(2) INFORMATION FOR SEQ ID NO: 1711:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 56 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
30
       (D) TOPOLOGY: linear

35
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1711:

TTTCTGCTTA TTGTCATTCG ATATCGAATT ATTAGAAAGT GCAGATTTCG CATCAG   56

(2) INFORMATION FOR SEQ ID NO: 1712:

40
    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 55 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

45

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1712:

TAAACCTTTA GGATTGCTGG CAATAGTAGT GCAGTTGGCT GGACTTGTCA TGCCC   55
50
(2) INFORMATION FOR SEQ ID NO: 1713:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 207 base pairs
       (B) TYPE: nucleic acid
55
       (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1713:

```
CAAGAGGATT CGTGCAnTGA ATTCATGGAG ATATTTAGAT CTTTCACTGG AGAGAAAATA        60

AAAAGAAGAA AAGAGTAACC TTTAGATTGC TGGATnTGTG CAGTGGCTGC TTGCGTGCCT       120

TTAGGTGGCA TAAGGAGGCT ATACGCAGAC AACCACCGTC CCGGGGTTTT ATTGTACACT       180

GTGTAGGACG CAGACTTTAT GTGGTTG                                          207
```

(2) INFORMATION FOR SEQ ID NO: 1714:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 84 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1714:

```
TGGTTATCGA CTGCTCGTAT ATTTTGACTG TTTTGACTGT TGTTCCGTA GCAATACTAT        60

CTCCTAAGCC TTTCATTGGC ATTG                                              84
```

(2) INFORMATION FOR SEQ ID NO: 1715:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1715:

```
GTTTGAATTG ACTGACTTCG TTTTACCGCG TGTTAATAT TGTTATACAT ATAT              54
```

(2) INFORMATION FOR SEQ ID NO: 1716:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 77 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1716:

```
GAAGCCTGTC AGTGGATCAA ATTATTGAAG ATAACTTGGG TGGCATTTTT GGAAAGTCCA        60

AATGCTGGGA ATGGTCA                                                      77
```

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 154 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1717:

GGGCCCTTTT TTTCCCAAAA AAAAAAACCC CCCCAACCCC AATTTTGGnC CCCCTTCCCC   60

TTTAAAAATT TAAAAATTGG GCCAAAAGGC CCCCCCAAAA AAAACCCCCA ATTGGAATTG   120

GAAAACCATT GGAACCAATT CCATTGAACC AGGA   154

(2) INFORMATION FOR SEQ ID NO: 1718:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 120 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1718:

ATTGTCTACA CTGCCACTTT ATTTTCATTA ACCATTTCAC AAATGTGTTC ATCATTCAAC   60

ATGAACATCA ATTGTTCAAT TACATCGACA CCTGATGCCT AAnCACGCAC CTTTTGCACA   120

(2) INFORMATION FOR SEQ ID NO: 1719:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1719:

TTCATTTGTT TGTAAAAGTG GCATTTCTAT GTCTTAAAAG TGACGAAACT TCAC   54

(2) INFORMATION FOR SEQ ID NO: 1720:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1720:

(2) INFORMATION FOR SEQ ID NO: 1721:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1721:

TTTGGATTAT AAATTGACAT GTAAGTACGA GGCAGCTGTA CCCGATATAT AATTGCTAAG   60

AGTTAGGGCT G   71

(2) INFORMATION FOR SEQ ID NO: 1722:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 325 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1722:

TTTTATCTTT ATTACTAAAA CCAACTGCAC CAAAGTTTGC AGTCATTACC ACACGTTTAA   60

CACCCGCATG TTCTGCAGCT CTTAAAATAC GTTGTATACC TTCAATTGCA GGCTTCGCCA   120

TCACTTCTGC ATCGTCTGTT TTACCGAAAA ACACCGGAGA TGCTACACTC AAGACATACT   180

TGCAATCTTT CATTGCTTCA TCCCAATGTn CATCTTGTGA TAAATCCGCT TCGACAAACA   240

TTAAATCGCT CTGTGGAAAT GCCCATGTCT TGCATTGTTT nAATTACTTT ATCAGCTTTA   300

CTTAAATCAA GnATCGTCGT TTGTA   325

(2) INFORMATION FOR SEQ ID NO: 1723:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1723:

CAGTATTGCA GTCACGACAA TGTGATGACT AAATTATCCA AAGTATGAAT TCCATGCGGC   60

ATTAATCCTA G   71

(2) INFORMATION FOR SEQ ID NO: 1724:

          (A) LENGTH: 53 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1724:

TTGCAACGAT ATTAGGCTAT CTAGTCGGCA TATTTGTAAA ACAAGATCCA ATT   53

(2) INFORMATION FOR SEQ ID NO: 1725:

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 71 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1725:

ATCTATTCAT CTTCGTACAC GGACAGGAAA TGAGTCCAGT AGATGCACAT TGGGAATTAA   60

TCGAAGCTAG C   71

(2) INFORMATION FOR SEQ ID NO: 1726:

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 71 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1726:

CATCTTGCAG GTCTACATTA TAAAATGTGA AGTTTTCTAC GATAACAATT GGGAAACTCA   60

GGGGCATCTC C   71

(2) INFORMATION FOR SEQ ID NO: 1727:

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 235 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1727:

TTCnTTTTTA AAAATTCCCC ATTCCTTTTT AAATTTCTTT CCCGCTGGAT TAAATGGATT   60

TTAAAAATTC CACCCCAACT TAnAATTAAA TGGCTTGTGG AAAATTAACG GGATTGGCAT   120

TCCAGCTTAA ATGGTTTTTT TGGAGGCTTC CACGTTAAAA ATGGCGGGTG GCTTT   235

(2) INFORMATION FOR SEQ ID NO: 1728:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1728:

TAGAGTGGCT ATAAAGCTAA GTTCAATTGA CCAATTTACA ACAGGTTATT GAGGACAATA   60

A   61

(2) INFORMATION FOR SEQ ID NO: 1729:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1729:

ATCACCAAGA AGTTCTAATG CTTGGTATAA ACGTTGAATA CGACGTTCGG TATT   54

(2) INFORMATION FOR SEQ ID NO: 1730:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1730:

CGTCCCGAAG CGTTGGAGGC GGGAACATCC AGAGTAATTG GCACAGATTA TGACCATAT   59

(2) INFORMATION FOR SEQ ID NO: 1731:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1731:

(2) INFORMATION FOR SEQ ID NO: 1732:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 105 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1732:

TATGTGGTGT TCAATGCAGT GGTCATTATG GTGCATCTTA CCAGATTCGG CATTCTTATT   60

ATAACTATAC TTGTAATAAA TGGCGACATG CAGACACGnC AATAC   105

(2) INFORMATION FOR SEQ ID NO: 1733:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 60 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1733:

TTTACGTTCC ATAGCAAAGT GATACAAACG TCAGCATCAA TGTAAGGCAT AGATCATAGT   60

(2) INFORMATION FOR SEQ ID NO: 1734:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 56 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1734:

TTCCATCATA CATTCGCGTT TTACTTTTCT TCTGGTATGA TCAAATATTC ACATAA   56

(2) INFORMATION FOR SEQ ID NO: 1735:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 57 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1735:

AAATGGGGAT GAAACAGTTA GTGTACAGGT GAAAGCTTAA CAGCAGCTAC AATTGCA   57

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 61 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1736:

GATTTGCAAT TAAACTTAAA TGTAATTTTT CGGAATGTGT ATTTGGTTTA CTTAAAGTAA   60

A   61

(2) INFORMATION FOR SEQ ID NO: 1737:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1737:

AAAGAAGCTA AAGAAAAAGT TGATAAAACA GCAAAAGTGA TTATTAGCTA CAGCATT   57

(2) INFORMATION FOR SEQ ID NO: 1738:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1738:

CAATAATATC GCTAAAACCG CCATTTGTAC CAAATGAATT TGATAATGCT GCAG   54

(2) INFORMATION FOR SEQ ID NO: 1739:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1739:

TAGAGCCCAA CCGGCAACCC ATCCATGGAA ATTCACCAAA ATAATACATT GACCCCAAG   59

(2) INFORMATION FOR SEQ ID NO: 1740:

   (A) LENGTH: 136 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1740:

CCTTTTTGGn AATTTAAGGG GGTTCCCAAC CAAATTCCCC CAAATTTTTT TGGGTTAAAA   60

AAACCCGGCC CAAAAATTTA AGGGAATTTG GAAAAAGGTT TGGTTCCCTT TTTTTCCCAA   120

GGCCCAAAAT TTGGAA   136

(2) INFORMATION FOR SEQ ID NO: 1741:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 53 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1741:

CATTCAACCA ACGACTGACA ACAGAACATT TAAGAGTCTA GGACATTGAT TGA   53

(2) INFORMATION FOR SEQ ID NO: 1742:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 52 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1742:

GCTCGTCTGA TTCAGTCACA AAATTGTCTT GTTATACTTG TCACCTATCA TC   52

(2) INFORMATION FOR SEQ ID NO: 1743:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 53 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1743:

TGTTATTTAA AGAGGCTCAA GCTTTCATAG AAAACATGTA TAGAGAGTGT CAT   53

(2) INFORMATION FOR SEQ ID NO: 1744:

(A) LENGTH: 94 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1744:

TCTGAGTTAA AGACGTCTCA CTTAAAGCTT TAGCAATTCC AACAATCAGA TATCTTCACA   60

CGTGTTATAT GTGTCCATTA ATATATCCTG TGGC   94

(2) INFORMATION FOR SEQ ID NO: 1745:

        (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 212 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1745:

GGAAAAAAnn TTTTTAAAAA AAGGGAAAAG GGAATTGGGG TTCCCGGCCC CTTTTTAAAG   60

CCCCCAAATT AAGGAAATTT TAAATTTTGG GGAAGGGGAT TTTCCACCGG TTAATAAACC   120

GCCGATTTTG AGGGGGTTGA ATTAATTGGC CCAAATTTAA AAACCTGGAT GCTGGGTCCA   180

ATTTTTTACC GGGACCAATT GGTCCTGCAT GA   212

(2) INFORMATION FOR SEQ ID NO: 1746:

        (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 58 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1746:

TATCTTCCGA TGAAGAACAA GATGCACAAG AAGTACGCCA ATGATTTAAG AAAGTGGT   58

(2) INFORMATION FOR SEQ ID NO: 1747:

        (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 105 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1747:

AAAAATTAAGn CCTTTTTTAA CCTTTCCCTT CCCCAATTGG GGCCT   105

(2) INFORMATION FOR SEQ ID NO: 1748:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1748:

AGTGCCTATT ACTTTGATTG ATGTCCAAGT TTCCTATCAC ACAACTTAAT TT   52

(2) INFORMATION FOR SEQ ID NO: 1749:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 95 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1749:

AAAGCATCAT CCGAACTCCA ATGATTATAC TCCCTAGATA TTATTATGTG ATGCTTTGAG   60

CATTAATTAG AGATGGGACG ATTCCATGAA AGATA   95

(2) INFORMATION FOR SEQ ID NO: 1750:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 63 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1750:

TTGACACATC TACTCACATT AAAAGTAGAT GAAGCGTTGA GATTAACATT TCCACATTTA   60

CAA   63

(2) INFORMATION FOR SEQ ID NO: 1751:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 116 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

TCGATATTTG AGACACGCTG CTGTAATAAA ACATCCTATA AAGTATATAC CAAGATCTAC   60

CAATATAAAC AGCGGCTATA TGATATAAAT GCTCAGACAC ACCCnCTGCG ATCCAT   116

(2) INFORMATION FOR SEQ ID NO: 1752:

       (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 114 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1752:

TATGATTAAG CTTAGTGCAG ATTTGATTTA TTnAACAACG CTTCACTACA TTAAAAATAG   60

GGCACTCGCA CATATAGTTG TATCAATAGC CTTTATCAAT TTTTTGGGAA GGTT   114

(2) INFORMATION FOR SEQ ID NO: 1753:

       (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 52 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1753:

AACTTCAAAT GTGCCAAGTG TTGAATCACA TCAAAATCAT TTTTATTTAA CG   52

(2) INFORMATION FOR SEQ ID NO: 1754:

       (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 75 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1754:

ACTAATCCCT TGCGTGTTTC CAATCAATTG CATTATTAGT GGCCATTTGT TTGATATAAC   60

TGACAAGCTT TAACC   75

(2) INFORMATION FOR SEQ ID NO: 1755:

       (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 53 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1755:

GTGAACAAGG GTAGATGTAA ATAGTTGATG CATGTGTACA CATCATAACA AAA   53

(2) INFORMATION FOR SEQ ID NO: 1756:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 66 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1756:

TTATTTGGGC AGGCAAATAC CCTTAATATA TTCAAATCAT GTTAATATCA TTGCTATTGC   60

TAAACC   66

(2) INFORMATION FOR SEQ ID NO: 1757:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1757:

ATTAATCGGA GCACTTGGGT TCGCAATTTA TGCTGAAATG GATCATTCTA CATCATC   57

(2) INFORMATION FOR SEQ ID NO: 1758:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 399 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1758:

CGAACAATAA CTCTAAGTAT CCAACAAATG CTGCAAGTGT ACCTACTGTG ATTGATCCAG   60

AAATAGCAAG ATATGCACCA ACACCGATGA CAATAATTGG TCCAATATCT GTAACTGTAT   120

TAATTGCGGC AAAGGAATAg GCATTCCATC TTGTATGTTT CAACGCACGT GTTAGGAAAT   180

TAGTATTCTT TTTATCAAAG TTTTTCGCTT CATTGTCTTC AATCGCAAAA CTTTTAACGA   240

CTGAAATACC TTGAACACGT TCATGCAAGA ATCCTTGAAC CTCAGCTAAT GCTTGAGATC   300

TTTCAnGTGT CAATTTTCTT AATCTTCCAA AGAAAACGTA CACCGTTAAA ATGTAAAATG   360

(2) INFORMATION FOR SEQ ID NO: 1759:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 139 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1759:

nATTATGTCA TGCTAGGTCA CTTGCATCAT CCATTTAGTA TAGAAGACGA CAAAATTAAA   60

TTATAGTGGG CTCCTTGATT GGCAGTATTC ATTTTCGGGA AGCGGGGTCC AGGCTTAAAG   120

GGTATTAGAC GTGGTTACC   139

(2) INFORMATION FOR SEQ ID NO: 1760:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 315 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1760:

TCGCCCCTCC AGGCTATTAT TTCATCTATA TCATTGTCAT CAGTTAAATT CAGCCTCGAC   60

ATTTCCATTT CAATAGACTG TTCATTCAAT TCTAAGTCAT TATTGTAAGT TTCTAGTTGA   120

TTTTCATAAT GATTTAGATT ATTTTGCTCA ATTAACTTTC TTTGAGACAA TTGCATTAAC   180

TTATCTTCAA TCTCCTTTGA GAGTTCTTGA TGCTGATTCA CATCTTGAAC ATACTTCTTA   240

TAATCCACCT CAAAATTAGT GATATTAnTA TATnTCGAGA GTGTTTCAAA TTCAGTGATG   300

AGATCTCGAC ATAAT   315

(2) INFORMATION FOR SEQ ID NO: 1761:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 399 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1761:

TAAATCCTCG AGATTCTTAA TAGGGTAGAT ATCTAACGTT TTCGCAAAGC TCTTTTTGAT   60

TTGTTCTTCT TTTGAATCTC CAATGATCTT ATTATCACCA TCACAAGATG TAACAAAGAT   120

CCATCCTCAT CATTCATCAT CTTCATCTAC CTTCGCgGCT GGAAATTCAA aGAaTCTATT   240

ACTGACAAAT CGCTTTTTCC ACCTTTTGAA AAGTCAATTT CCAACTTTTT ATAACCCACA   300

GAACTTCCTT TCAAATTACC ATCAATATGC ATTTTTAATA CCGGTGCTTT ATCAGTAGGA   360

ATATTATAAC GACTTCTTAA TTGCTTAACA TTTTCATCT   399

(2) INFORMATION FOR SEQ ID NO: 1762:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 224 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1762:

GTATAGAAGA CGACAAAATT AAATATAGTG GCTCCTTATT GCAGTATTCA TTTTCGGAAG   60

CGGGTCAAGC TAAAGGGTAT AGACGTGTAC AATTAATGAT GGCATTATTA ACGATGTATT   120

TATTCCTCTT AAGCCACTTA GACAATTGGn AATTATCTCA GGCGAATATA ATGATGTTAT   180

TAATGAAAAA GTTCATGTGA AAAATAAAGA TAATTATnTA CATT   224

(2) INFORMATION FOR SEQ ID NO: 1763:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 54 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1763:

AGCAACCAAC GCCAGATAAA GCAGAAGATA ACGCATTTCC CCCCATCACC ATAT   54

(2) INFORMATION FOR SEQ ID NO: 1764:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 59 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1764:

ATTCCCTTAT CGCATTCTGT AAAATGATCT TCATCAGAAA TTGCTTCGAT ACGTTTATG   59

(2) INFORMATION FOR SEQ ID NO: 1765:

        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1765:

GATTCAATTC ATCTGTATAG ACGATATATC CTGATATGAA TTGGAAATGG AATA   54

(2) INFORMATION FOR SEQ ID NO: 1766:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 85 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1766:

ATCGCATAGA AGCATTAGAC TCAAACTATT TTCGGTTATG AGAATAACTC TGACATCCAT   60

ATGGATACTT AGTTTCCAAG TTAGA   85

(2) INFORMATION FOR SEQ ID NO: 1767:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 54 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1767:

CAGTACTGCT GAATGATGCT ATTGATTTTC TCATGAGACA TGGCGATAAC ATCG   54

(2) INFORMATION FOR SEQ ID NO: 1768:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 116 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1768:

GnCACTACTA ATCGTATCAG GATCACTAAT TAAGGCATCC AGCATCAGAT ACGAGCGCAC   60

GTCAGACTAA TCTACTGTCA TGATAAAGCA GCTGCTAACC TTGTAAGTTC GTGAAA   116

(2) INFORMATION FOR SEQ ID NO: 1769:

        (A) LENGTH: 82 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1769:

GTTCTATCCA ATATGGAAAT GAGGACATTA TGCGTGAAAG CTATGGACGA TGGACGATGG   60

TACACGCATG TTGTGTAAGC AG   82

    (2) INFORMATION FOR SEQ ID NO: 1770:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 152 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1770:

TATCTGTATT GTAGTAATCC GCTTCTCCCA TCTATATAGG GATCTTTCGT AGATATTCAC   60

TTTATGCCTA GGATCCAAGA TGTGTAAGCA GCACTTTGCA TTATCTAATG CAAAGGGnAC   120

ATGCGGCTGT AAGCCCTGTT CTGATAATCA TA   152

    (2) INFORMATION FOR SEQ ID NO: 1771:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 51 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1771:

TGGAGGCGAA GTAAATGAAA AGTATTACGT TTGAAGAACA TTATGTCATT G   51

    (2) INFORMATION FOR SEQ ID NO: 1772:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 232 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1772:

nGAAACAAAT ATCTGATGAG ATATGCAATG ATGACTATAA GTAACATTAA AATGAAGCCC   60

CGTACACCAA TTATATCTTT GTGGnTGTTA TATTAAATCT ATATTATGTT CATTTAACAG   180

CATATGTTAA AAATTGACAG TTAACACATG TAGCTATTTG ATGTGAATGT GC   232

(2) INFORMATION FOR SEQ ID NO: 1773:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 108 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1773:

TAATGTCCCC CAGAATGTAG GCAAATGCAG AACCTGGTTT TAGGGTCAAC TGTTTnTTCT   60

CCAAGCAGAA ACAAAGTTCT TGTGTCAGTG CACTTTTGGT CCACCATT   108

(2) INFORMATION FOR SEQ ID NO: 1774:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 111 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1774:

CGCAATTGAA GGATACACTA TTTTAAGAGC TGCAAACATG CGGGTGTAAC GTGTGGTATA   60

CTGCAACTTT GGTnATTGGT TTAGTATAAG ATAAAATCAT CACAATGAAT C   111

(2) INFORMATION FOR SEQ ID NO: 1775:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 73 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1775:

CAGGTTATCA GCTAATAGAT ATGTTGAAGA GGCAGTTGCA GGCCAAATGA AACTGCAGAT   60

GTAGTTCAGT ACC   73

(2) INFORMATION FOR SEQ ID NO: 1776:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 67 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1776:

TAGACACAGT GCAAAATCTG GTACAGCTTA TGGAATTAGA CGGGTAAAGC AAATTACTGA   60

GTACCCA   67

(2) INFORMATION FOR SEQ ID NO: 1777:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 127 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1777:

GTATGCCAGT GTCATTGCTG AAAACATCAA CCATTCCCTG CACCAAAATT TTTTGGTAGA   60

GTTTGATGCT GGCCATCCTC CAAGGGACTA AGGGTAATTT TGnTTAAAAA GAGCCAAAGG   120

CCCAATG   127

(2) INFORMATION FOR SEQ ID NO: 1778:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 236 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1778:

GAACCCAAAA ATTAGCAACA GTGGCTACAA TAGTTGGGCA CTGAAAGCCA GCCAAGTGGG   60

ATTTTTAGCC CTTGATTTGA AAGCGGGGTC CCCAGGATTA AAAAATTTAA ATTAGCCTAA   120

TAAGCCCAAA ATTCCCATTT GGAAAAGGAA ACCTCCTTAA ATTGGGTTGG AAAAAAGnTT   180

AAAAAAAAAA AGGCCCAGnC CTTGGAATTT TTTGGAATTG GAAAAAGGAA TTAAAA   236

(2) INFORMATION FOR SEQ ID NO: 1779:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1779:

(2) INFORMATION FOR SEQ ID NO: 1780:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 231 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1780:

GACGACTCGC TTCTATTTTA AAATCCGGCG TACTTgGTTA TATAAATATC ATAATGGTTA   60

AAATTAAAAA GCAATGTCAG TTCACACTAT TACTGACATT CTTTTAGTTA TGTGTATATT   120

ATTCATTCAC AAGCTTTTGG TCTATAAATC GAGTGATTTG CTTTGTTTGT ATATAACCAT   180

CTGCTACATA TTCATCGTTC ATTGTAATTA ATGGATAAAA TAGTTCATCn n   231

(2) INFORMATION FOR SEQ ID NO: 1781:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 209 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1781:

GTCTCCCTGC CCCACATTTA ACATTGTAAT TTTGTGATGT GAATTTGTTG GAAACGTTAT   60

TAATAATGTC AGAATAATTA TAGTCCAAAA CGTAACCAAT ATATATTTAC GTTTAGCCAA   120

TAACCAAAAT ATGTAATAAA CAGAAATTAT AAATACTATA AATATCCAAT CATTAAACTT   180

GGGAACAGAA AAATGTGATT GCTTGATTC   209

(2) INFORMATION FOR SEQ ID NO: 1782:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1782:

GTTAAACTTA GTTAGATAAA ATGCAAATCA CATTATTGTA GATAGTCTCT TTTC   54

(2) INFORMATION FOR SEQ ID NO: 1783:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 120 base pairs

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      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear
```

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    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1783:

TCTGGAATGT CTCCTTGTCT CTCTATATAG CTATAGTCCG TCGCAAGCGG ACGTAATGTT          60
```

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CATTTTCATA ATGATTATAG TATGAAAGCG CTTTCTTGTA TATGTGACAT GTGCGTGTnG         120

(2) INFORMATION FOR SEQ ID NO: 1784:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 57 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear
```

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    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1784:

CTACCATTTA CATAAAGACC GTCTAATTCT TCAGTTTCAA TGGCATTTTG GAGCAAT             57

(2) INFORMATION FOR SEQ ID NO: 1785:
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25

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      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 54 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear
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    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1785:
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TCATAACCAT TACCAAGTAT CCAAGCAGCT TTTAAACAAT ATGGCATAAA CATT               54

(2) INFORMATION FOR SEQ ID NO: 1786:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 84 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear
```

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```
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1786:

GGATGGGTGA TTTTAGCAGG TTTGGCTATG AGTACCGTAT TTGCATTAGG ACCGATTTCA          60
```

```
TTTAACAAAA TCATAATTTT GGGC                                                84
```

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```
(2) INFORMATION FOR SEQ ID NO: 1787:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 134 base pairs
```

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```
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1787:

CCGGTTTACC CTTAAAATTA TTTTTTGGGG GGTTCCATTA AACCTTCCAA TTCCCAATTA        60

ACCCCnACCC CCCTGGGTTT TCCTTAAAAA CCAAAAGGCC CTTTTTTTTC CCAACCCAAC       120

CTTGGGGGAA TTGG                                                        134

    (2) INFORMATION FOR SEQ ID NO: 1788:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 70 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1788:

TATATCAACT AAAAAGCGCA TCTGCAACCG ACGGTTGAAA ATTTGGACAG GAGACAGATA        60

ATGTAATATA                                                             70

    (2) INFORMATION FOR SEQ ID NO: 1789:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1789:

AATATCCAAT TATACAAGCA GGTATGGCAG GAAGTACGAC ACCGAAATTA                  50

    (2) INFORMATION FOR SEQ ID NO: 1790:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1790:

TGATTTACTA GCTGAATCCG ACATGCTTGA TGATACACTA TGTGAATTCA                  50

    (2) INFORMATION FOR SEQ ID NO: 1791:
```

```
                    (A) LENGTH: 58 base pairs
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
 5                  (D) TOPOLOGY: linear
```

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1791:

10   CCGGACGCTT TACTTCCAAC TTTAGGTGGT CAACACAGGT TTAAACATGG CGATGTCA   58

      (2) INFORMATION FOR SEQ ID NO: 1792:

            (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 58 base pairs
15   (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear

20
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1792:

      CATCATCCTC TAATTTAGTC CAAACTCCTG GATGATATCC AAATGAAGTT CCAATTGA   58

      (2) INFORMATION FOR SEQ ID NO: 1793:
25
            (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 62 base pairs
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear
30

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1793:

35   CACAAGTTTT AGAAGGAAAC CAATAACAAA TGACGAGATT AATTGCCACA AACATTAACG   60

      AC   62

      (2) INFORMATION FOR SEQ ID NO: 1794:

40   (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 103 base pairs
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear
45

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1794:

      AAGGCCCGGG GGGTTTAAAA AAAAAGGTTT AAAAAAGGnT TTGGCCCTTT AAACCCAAAG   60
50
      GGAAATTTTA ACCCCAAAAA AAAAAAACCC CTTTGGGAAA GGG   103

      (2) INFORMATION FOR SEQ ID NO: 1795:

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```

        (A) LENGTH: 121 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1795:

TATCGATCGA TCATGTCGAA TCGATCTGTC GATCGATCGT ATCGATCGAA TCGCGTCGAA        60

TCGAATnCGT CGAATCGATG CTATCGATCG AATGCTATCT GAGTCGAATC ACGTCGATCT        120

G                                                                        121

(2) INFORMATION FOR SEQ ID NO: 1796:

        (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1796:

AATTCATGTT AAAATCCTCC TGATATTAGA TGGCCCATTT TTATTTTTTT CGTTTCCATA        60

TA                                                                       62

(2) INFORMATION FOR SEQ ID NO: 1797:

        (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 397 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1797:

CATACTCGAC AATTTAGATG GTGAaTACTT ATCATTTAAG TCCTTTGaCA CCTCATCTAA        60

AATTCTAGGA CTTTTAACAA TTTCTTTATA CGTATTTACA AGTTGAATAT TACTTTGAAC        120

CTCTTGCGCC ATAAACTGAG GATTGTCACC CTTAGTTTGA TTCACTAAAA TTTGAGTATT        180

AGCTTGATAT TTAGGTGATA AGACGAAAAA TGTAACAATA GCGCTAATAA TTAAAAATAA        240

TAGCGGTAAA ATAATTAAAA TCTTCAAGTT TTTTTGTAAT ACTTCTTTAA TTTTTGTTAA        300

TTCTAATGTA CTTTCCATTA TTTACCTCCC TTAAAAATTT TCATTAAAAT TGGTATTATA        360

TATATAGTAT TTACATATTA CATATCGTTT AAACAAT                                 397

(2) INFORMATION FOR SEQ ID NO: 1798:

        (A) LENGTH: 66 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1798:

CGGGTAACAG CGAATGGTGT GTCACCGTAT ATAACTTTAC TATTTAATAT TTGGCCTGTT        60

GCTTTC                                                                  66

(2) INFORMATION FOR SEQ ID NO: 1799:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 77 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1799:

GTTGCTAAGT TTGTATTACA ATTTAAATGA TTTTTAGCTT GAGTAAGTTT ATTTAAAGAT        60

GCAGTAATTT CGCTAGG                                                      77

(2) INFORMATION FOR SEQ ID NO: 1800:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 172 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1800:

TAATGCTATT TAATTTTCTA CTTCCTAAGC TTCCACCCAT AACGAGTAAn ACTTTTTTAT        60

TTTCATTAAA GCCTGTTAAT TGATAACCAT TATGTGCATT ACCATTTTTT AAATCTTCTC       120

GAATTGTTGC TCCAATAAAA TCAGCTTTCT CTTTAGGTAA GTAGTTTAGC GT              172

(2) INFORMATION FOR SEQ ID NO: 1801:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 140 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1801:

AGTAAAATTT GTCATCACGA TCAGCAAAAG CTTTTGATTC TGACGTATCT TCCATAAATG          120

ATCTAAAAAT TGGTAGTTCG                                                      140

(2) INFORMATION FOR SEQ ID NO: 1802:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1802:

ATCCCCCGTA CAGACTTCAG CTTACGTAAA CATGCTGAAC ACTCTAGTGA AGATTTCAAA           60

(2) INFORMATION FOR SEQ ID NO: 1803:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1803:

CAATTTAAAT GCATCTTTCC CATTAATTTC ATTTGTTGTC GCTTTAGCTG TGTTAATTAA           60

(2) INFORMATION FOR SEQ ID NO: 1804:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1804:

ACTTGATCGA AAAGGTTTCA TACCGGTAAA CGATAAAGTT GAAACAAATG                      50

(2) INFORMATION FOR SEQ ID NO: 1805:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1805:

(2) INFORMATION FOR SEQ ID NO: 1806:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 70 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1806:

AAGAACTGTC TATGAATATT GGATGACGCT TTGATGAGAA CATTAGTAAG CCATTTGTTC     60

AAGGAGTACA     70

(2) INFORMATION FOR SEQ ID NO: 1807:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 77 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1807:

TAGCATTTCT AATGGAATCC AATCTTACCG AATGACAATT GGAATATAAC TGGTGATAAT     60

GTTGAATGGT CCTGTGA     77

(2) INFORMATION FOR SEQ ID NO: 1808:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 121 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1808:

CCCGGCCCAA AACCCCTTTT TTGGGTAAAA AATTTTTTTT AAAAAGGGAA AAATTTCCCC     60

TTTTTTGGTT CCCAAATTTT AAATTAGAAA GGGCCCCCCC TTCCCCCCCA AATnTTTCCC     120

A     121

(2) INFORMATION FOR SEQ ID NO: 1809:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1809:

AAGTTTGGTG AAGGAACCAC GTGCATGATG GTGTTCAAAC AATGCGTTAC GATGTTGACG          60

(2) INFORMATION FOR SEQ ID NO: 1810:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1810:

TGGTTGAGAA AACACAGCGT TAAAGTTGAG GTATTTCAAA AGACAAGTTG GAACATTA          58

(2) INFORMATION FOR SEQ ID NO: 1811:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1811:

CTTAAATAGC AAGTGGTTTT ATAACAACTT TGAGTTATCT CAATATAGTT ATCGC          55

(2) INFORMATION FOR SEQ ID NO: 1812:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1812:

TAAGTCTTCA ATTTTTTCAG TTGATACACC TAAGTGATAC AGCCATTCTT          50

(2) INFORMATION FOR SEQ ID NO: 1813:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1813:

(2) INFORMATION FOR SEQ ID NO: 1814:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 1002 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1814:

```
TGGTCATGCG GGAAATACTA GGACATGAAA ATTATGCTAA AGGCATCAAA GTAACTGAAA      60

ATAATGGCGT AGTGGATATA GATATGTACA TTATTGTAAG TTACGGTGTG AAAATATCTG     120

AAGTTGCCAA TAATGTACAA TCAACAGTGA AATATACTTT GGAAAAATCA CTTAATGTAT     180

CAGTAAATTC AATCAATATA TATGTACAAG GTGTACGTGT GAATAATACA GGCAAGAAAG     240

CTTAGGAGGA CAACTTGAAA TGATTAGCAA AATTAATGGT AAATTATTTG CCGATATGAT     300

TATACAAGGG GCACAAAATT TATCTAACAA TGCAGATTTG GTAGATTCTT TGaATGtGtA     360

TCCAGTGCCA GATGGtGATA CAGGAACAAA TATGAATCTT ACTATGACTT CAGGTCGCGA     420

AGAAGTAGAG AATAATTTGT CGAAAAATAT CGGCGAATTA GGTAAAACAT TCTCGAAAGG     480

TTTACTAATG GGTGCAAGAG GTAACnCTGG TGTCATCTTG nCACAATTAT TCAGAGGATT     540

TTGTAAAAAT ATTGAAAGTG AATCTGAAAT TAATTCAAAA TTGTTAGCTG AAAGTTTnCA     600

AGCTGGTGTT GAAACGGCAT ATAAAGCTGT TATGAAACCA GTTGAAGGTA CAATACTTAC     660

AGTTGCAAAA GATGCTGCGC AAGCTGCAAT AGAAAAAGCA AATAATACTG AAGATTGTAT     720

AGAATTAATG GAGTACATTA TTGTAAAAGC CAATGAATCA CTTGAAAACA CACCAAACTT     780

ATTAGCTGTA CTTAAAGAAG TTGGTGTTGT TGATAGTGGC GGTAAAGGTT TGTTATGCGT     840

TTACGAAGGA TTCTTAnAAG CGCTTAAAGG TGAnAAAGTT GAAGCCAAAG TTGCAAAGAT     900

AGATAAAGAT GAATTTGTAC ATGATGAACA TGATTTCCAT GGTGTAATTA ATACTGAAGA     960

TATTAATTTA TGGCTATnGT ACTGAGATGA TGGTTCGTTT TG                      1002
```

(2) INFORMATION FOR SEQ ID NO: 1815:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 351 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1815:

GACAACGCTA TTATTTTTAG TTTTTCAATT CTATTATGTC ATAATTATGT CACTCAAAAA   120

CTGTTTTCCA ACATTGATTT ATTGTTGGAA AATCTCGAAA ATCTAGTCTA TTTCTCCAAC   180

AATCGAAGAr TTATGCCCTT TTTTCTCCCT TTaAATAAGT CATAATACGA GGCATACATG   240

CAACATTTAC AATAAAATAT GTTCCTACAT CGTATTATAC GAATGCTCAC ACTTATAGTT   300

GTTTAGTAAA CCCAGATGTA TTGCTAACAT ACCCATnAnC nCTATATAGT T   351

(2) INFORMATION FOR SEQ ID NO: 1816:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 62 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1816:

ATATCGTATC CCATGCGGGA AGGGCTTTAT TTATACTGTG CACGATGAAT GCGCACAACG   60

GG   62

(2) INFORMATION FOR SEQ ID NO: 1817:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 70 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1817:

AAAGGGGGGA AATTTTTTTT TTTTGGGTTT GGGGGGAAAA TTTTTTTTGG GTTTGGGAAA   60

TTTAAATTAA   70

(2) INFORMATION FOR SEQ ID NO: 1818:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 51 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1818:

CAAGTTCGGA ATGCGAACGC GTCTTAATCT ATATACAAGT GATGCACTCC A   51

(2) INFORMATION FOR SEQ ID NO: 1819:

```
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1819:

TCGCCATACT ATCGACAGCT GCTAAAATTG CGCTCTTCTT GTGTCGCAAT CG   52

(2) INFORMATION FOR SEQ ID NO: 1820:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 58 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1820:

CAAATTGGGG AAATTACTAG AAATGAAGAT ATTTATAAAG ATGACTGGAC GTCAACTT   58

(2) INFORMATION FOR SEQ ID NO: 1821:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 58 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1821:

ACTGCTTCAG CACCTGTATT CATTGGGGAA AGCTTTATCG TTGACCGGCC AGTTTACA   58

(2) INFORMATION FOR SEQ ID NO: 1822:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 190 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1822:

ACCTGTTGCT CGTGTCATAA ATAGGTGACT ATAAATCTCT GTTCAATATA CTTTTCGTTT   60

TTCCAATCTT AAAGGTCGAT GTTCGTGAGT AATCTTATCT CTGGnCCAAT TTTAATGTCA   120

TGATATGTTC ATAGTATCAC CCCTTTGTTG TGTAATAATA ATCAGGTGGG TGGTTAGAAC   180

GGTGTGAATA   190

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 50 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1823:

AGCnTTAGCn TATGGTTTAG ACACAACTGn TAAAGATGCn AAGTTCTTGT   50

(2) INFORMATION FOR SEQ ID NO: 1824:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 102 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1824:

AAAAATTGGA AAAAAGGGGC CCAAAGGTTA ACCCAAATTG GAAAnAAACC CAAATTTTTT   60

GGAAATTAAC CCAAAAATTG GCCCCCAATT GGAACCCAAA AT   102

(2) INFORMATION FOR SEQ ID NO: 1825:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1825:

ACGTACCAAT GTCATAATCA GTCATTTTAC CACTCTTAAT AATCTGCTTC CGGGCAA   57

(2) INFORMATION FOR SEQ ID NO: 1826:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1826:

ACCATCTTGT ACAAAGTGGA TGTCATATGC ACCATCTTGT GTTTTGAGCT GCATTTAATT   60

G   61

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 56 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1827:

ACCGTTTCGC CAAGCCGACC TAATTTCTCA GCAATATTTC TTTCTACGCC ACCAAT   56

(2) INFORMATION FOR SEQ ID NO: 1828:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 62 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1828:

ACTTATAGGG CGCACTTATT TTTCGCTTCC ATAGCGAAAC TAGTGTCACT TATACGTATG   60

TG   62

(2) INFORMATION FOR SEQ ID NO: 1829:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 54 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1829:

GCTACACACG ATTTACCTTT CTTGTCACGT TTTGCGACCA TCATTGTGAT GATA   54

(2) INFORMATION FOR SEQ ID NO: 1830:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 67 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1830:

GTAATGACCA TCGCTGATTT ATGACATTGT TAGATCTCAT GTGCCATTTA GTCTGCTGAA   60

TCTTGGG   67

(i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1831:

ATAACTCTTC GnCAAACTCC TCAACAAACT TCTTGTGTTC CATCTTCTGG   50

(2) INFORMATION FOR SEQ ID NO: 1832:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 101 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1832:

AAACGTnAGA ATATTTAATG GAGCCAAGAA TGGTTTACAG ACGGAGAAAT GGGATATGTT   60

GAAGCGAGGC GTACGCGGAA AGCGTACTAG GCTAGAACAC T   101

(2) INFORMATION FOR SEQ ID NO: 1833:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1833:

TCGTCATCAT GTCTGTGTTA CCAACGTTTG ACGATTTAnT TCATGCnGAA   50

(2) INFORMATION FOR SEQ ID NO: 1834:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 55 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1834:

ATAAGTTAAT TGATTTATTG ATAAAGAGAA GCCAGATTTA AATATTATTA AACGT   55

(2) INFORMATION FOR SEQ ID NO: 1835:

> (A) LENGTH: 58 base pairs
> (B) TYPE: nucleic acid
> (C) STRANDEDNESS: double
> (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1835:

AAACAAGAAC CCCCATATGG TTAAGCTGCG CGTTTCAACA TACGGGGGGT TTTCATAT   58

(2) INFORMATION FOR SEQ ID NO: 1836:

> (i) SEQUENCE CHARACTERISTICS:
> (A) LENGTH: 125 base pairs
> (B) TYPE: nucleic acid
> (C) STRANDEDNESS: double
> (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1836:

TACGTTTTAT AAAAACAAGA ACTAAAGTAT GCAGTGTGAA TTGTTCACTT TCnTGGCGTT   60

GGAATTGATT AAAACGAGAT ATGGTGTTGT GGAAGTTGTT TGTGTTTGCA TATTTTAAAC   120

CGATT   125

(2) INFORMATION FOR SEQ ID NO: 1837:

> (i) SEQUENCE CHARACTERISTICS:
> (A) LENGTH: 118 base pairs
> (B) TYPE: nucleic acid
> (C) STRANDEDNESS: double
> (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1837:

AATCTACAAT CCTGAATCAC TCGTTAAGAT TAAAAGTATC GACAATGAGT ATCTGAACAT   60

GAGCTCATCT GCCGTTTTTA ATGCnAAAAA CCGGCGGCGG GATATTTTTG ACCACGGC   118

(2) INFORMATION FOR SEQ ID NO: 1838:

> (i) SEQUENCE CHARACTERISTICS:
> (A) LENGTH: 141 base pairs
> (B) TYPE: nucleic acid
> (C) STRANDEDNESS: double
> (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1838:

ATTTGGGGTT TTGGGACCCT TACCCAAAAA TTGGGGTTTG GTTATTAAAA AAAAGCCATT   60

GTCCCAGTTT TTGGGATTGC C   141

(2) INFORMATION FOR SEQ ID NO: 1839:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1839:

TCTGGGGACT AAGTATGTCT CAGGCTTTAT GCTGTTATGT TTGAAAATGA AAGG   54

(2) INFORMATION FOR SEQ ID NO: 1840:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 133 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1840:

ATTAAAAAAC CTTTTTAAAC CGGGAACCCA AGGAAAAATT CCGGGTTTTA ATTAAAACCT   60

TTTGTTAATT GGTTCCAAAC CAACCTTTTG GGTTAATTTT AACCAGGAAT TTTGGAAAAC   120

nGTTTTATTT GGA   133

(2) INFORMATION FOR SEQ ID NO: 1841:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1841:

AAAGTATGGA TTGATCGTGG AGAAGTTCTT CCTACTAAGA ACACTAGTCG   50

(2) INFORMATION FOR SEQ ID NO: 1842:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

GCGTTTTCCT GGGATATGTT TGATGAATGG ATGTTGTAAC ATGTTAATAA ATCGTTGGTA   60

(2) INFORMATION FOR SEQ ID NO: 1843:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 60 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1843:

CTGAGATGAA TATTGTGTTT CGCCATACAT ACTGGGTAAT ATCCCAACCA TTGCTGTAAA   60

(2) INFORMATION FOR SEQ ID NO: 1844:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 125 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1844:

CATTACCTGT AAAAGGAAGC TAAAGACGAT GAGTATTTAT AGAAACCAAT TGCCGACCAT   60

TTGCAGCCAT TAGGAGGGTA GGAGGGCAAT CGCGnCCAAA GGTTATTAAC CGTCAATTAC   120

CTTGA   125

(2) INFORMATION FOR SEQ ID NO: 1845:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 126 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1845:

ATCCACCTGG GTTTGTTCTT AATTTAACCT GnTAATTAAT TGGGTTGGGT CCGGCAAAAG   60

TCCGGACCTG CAAATCGGAT TTTATCGTTA AATCTTGAAT TCTATTGCCC ATATTAAATC   120

GCAAAT   126

(2) INFORMATION FOR SEQ ID NO: 1846:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 57 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1846:

TTTTGGGAAT AAACCAATTA ATCATGGGCA AAAAATAAGC AATCCAAGTA CTTACTA   57

(2) INFORMATION FOR SEQ ID NO: 1847:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1847:

TGATAAATAT TTCATCTAAA GAGAGGGAGT CATTATGACA CTACTTACTG   50

(2) INFORMATION FOR SEQ ID NO: 1848:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 65 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1848:

ATCTAGGCAA TGAATGGACG GACTTAATAT TGATGTGCAA CAAGAAGAGG AGAAGCGAAT   60

CAATA   65

(2) INFORMATION FOR SEQ ID NO: 1849:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 244 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1849:

CGTGTGAAGT CATTACTTTT AATCCCATGA TGATGGTGAT GGATGAGACG ATATCTCTCT   60

GTCTTTAACA GTTAAGTCCA ATTCTTCCAA CGAAACTTTT CCATAGGTTG TTTTATAAGT   120

TGGAATACTT GCACAAATCA TaCCTAATTG CTTATCAATT TTCTCAAGAC TGTCATCAGT   180

TATAAGATCA ATTTTATTAA TAATAATCAT GTCACTTAGT TTCAACTGAT CTTCCATCAG   240

GCGA   244

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 106 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1850:

TTTAAAGGTT CCCGGAAAGG TTTGAAACCA AACCTTTGCC CCGGCCCCCC GGGAAAAAAA   60

AAAnTTGGTT TAACCCCCGG GGGGGGGGGC CCTTAAAAAA ACCCAA   106

(2) INFORMATION FOR SEQ ID NO: 1851:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 84 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1851:

TTTTTTAAGG CCCTTGGGGG GCCAATTTTC CCCCCCCCCC AACCTTCCAA AGGTTGGGGG   60

GCCTTTTTTT TTAAATTGGG GGGA   84

(2) INFORMATION FOR SEQ ID NO: 1852:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1852:

TCATGATTAA AATTCAACAA TTACAACATC ACTTTGGATC ACATAAGAGT AA   52

(2) INFORMATION FOR SEQ ID NO: 1853:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1853:

ATAAAACATT TCAAGATGCG CTTGTAATTG TATGTGATAC TGCCAATGCT CCACGA   56

2077

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1854:

AAAAGATCAT GCGCATAATG ACATGGTGAT GATATGAGTA TGATGGTGGG TACA   54

(2) INFORMATION FOR SEQ ID NO: 1855:

 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1855:

ACAACAAATG GTAATGCATA AACATACAGC CAATAGCTAC AATTGCACGA CG   52

(2) INFORMATION FOR SEQ ID NO: 1856:

 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1856:

ACGGCTGCAC TCATCATGGT CTGTGGCGTG ATTGTTAATG TTTTAGTTGC CCGCTTC   57

(2) INFORMATION FOR SEQ ID NO: 1857:

 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 192 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1857:

GCAGATAACT TCCTTGATCC TAACAAAGCA AGTTCTCTAT TATCTTCAGG GTTTTCACCA   60

GACTTCGCTA CAGTTATTAC TATGGATAGA AAAGCATCCA AACAACAAAC AAATATAGAT   120

GTAATAnACG AACGAGTTCG TGATGACTAC CAATTGCACT GGACTTCAAC AAATTGGAAA   180

(2) INFORMATION FOR SEQ ID NO: 1858:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 77 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1858:

CGCTGCACTT CCTGAACGCA GTGAGACCAG AACGTGGTGT CACTTTCGGT CTATTCCGGT   60

TAAGTGTTGG TCTCGGA   77

(2) INFORMATION FOR SEQ ID NO: 1859:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1859:

TTTGGCGTTC GTGATTTTCT CTAGACGTAG TAACTTTCCC ACTCTTTGCG TCC   53

(2) INFORMATION FOR SEQ ID NO: 1860:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1860:

TTTCTCACTC GCGCATTTCA GTTTGTTTTG ATTTACCCGT CTCTTCTATT TGTCTTAAT   59

(2) INFORMATION FOR SEQ ID NO: 1861:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 69 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1861:

AATGAATGTA TGCACATTAA CATCATCAAT TAATCCTTTT AATAAATTGA GTTGTAATTT   60

(2) INFORMATION FOR SEQ ID NO: 1862:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1862:

ATTAATACTG AGCAAATGTG CATAAGACAT CATGAATTAG CACCAATTTA CAGG   54

(2) INFORMATION FOR SEQ ID NO: 1863:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 89 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1863:

TTTAACCATC ATTCTATGTC AAAGTTTTGA AATGATGGTT ATTTTTTATT GCTTAAATTT   60

ATTATTGCTA CTACTATACC AATGAAAGT   89

(2) INFORMATION FOR SEQ ID NO: 1864:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1864:

AAAGCTGGTA CGCCTGCAGG TACCGGtCCG GAATTCCCGG GTCGACCCAC GCGTCCGGAA   60

CCAAAATTGC ATCTGATGGT CTCAAGGGTC GTGTGTTTGA AGTGAGTCTT GCTGATTTGC   120

AGAATGATGA AGTTGCATTT AGAAAATTCA AGCTGATTAC TGAAGATGTT CAGGGTAAAA   180

ACTGCCTGTA CTAACTTCCA TGGCATGGAT CTTACCCGTG ACAAAATGTG TTCCATGGTC   240

AAAAAATGGC AGACAATGAT TGAAGCTCAC GTTGATGTCA AGACTACCGA TGGTTACTTG   300

CTTCGTCTGT TCTGTGTTGG TTTTACTGAA AAAACGGCAA CAATCCAGAT ACGGGAnGAC   360

CTCTTnTGCT GCAGCACCAA CAGGTnCCGC CAAATCCGGA   400

(2) INFORMATION FOR SEQ ID NO: 1865:

```
            (A)  LENGTH: 51 base pairs
            (B)  TYPE: nucleic acid
            (C)  STRANDEDNESS: double
            (D)  TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1865:

AAATGGCGTA TCTTTATGTA TCAACTAAGT AATCACCAAT TTCTTTCGGA T   51

(2) INFORMATION FOR SEQ ID NO: 1866:

```
      (i)  SEQUENCE CHARACTERISTICS:
            (A)  LENGTH: 58 base pairs
            (B)  TYPE: nucleic acid
            (C)  STRANDEDNESS: double
            (D)  TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1866:

GTGTTGCGGA TAATCCGTCG ACATTAGCGT CTGAAGGTAT CATGAGGCAA CTGCGCAA   58

(2) INFORMATION FOR SEQ ID NO: 1867:

```
      (i)  SEQUENCE CHARACTERISTICS:
            (A)  LENGTH: 60 base pairs
            (B)  TYPE: nucleic acid
            (C)  STRANDEDNESS: double
            (D)  TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1867:

ACAGCAACTG ACCCAGTTTA CTACCGTCAC TCAAATCACA CAGGTGGTAT CAAATCAATC   60

(2) INFORMATION FOR SEQ ID NO: 1868:

```
      (i)  SEQUENCE CHARACTERISTICS:
            (A)  LENGTH: 56 base pairs
            (B)  TYPE: nucleic acid
            (C)  STRANDEDNESS: double
            (D)  TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1868:

CAATCTCTTA CCATTTATCT CAGCTGGTGA AAACGGTCCA TTACACTTAG AATAAA   56

(2) INFORMATION FOR SEQ ID NO: 1869:

```
      (i)  SEQUENCE CHARACTERISTICS:
            (A)  LENGTH: 65 base pairs
            (B)  TYPE: nucleic acid
            (C)  STRANDEDNESS: double
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1869:

GCTATAGACT AGAGGTACAG CAAATTCATG TGTACAGTGA TTAGAAGGCG ATGAGCAAAA   60

GTAAT   65

(2) INFORMATION FOR SEQ ID NO: 1870:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 173 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1870:

GCTACTGGCG GGGGATAGTA ACACCCAATG TTACACGTAT ATACGTACGG CTTCTTGATA   60

AAAAGATGAA GCCnTTACAA GTAGAGAGCG TAAGAACGTG ATCATCTAAA TGGTAAGGGT   120

AGACTATCCC ATGCCATTGT GGGCGGTTGC ATAGGTACCA CGGCACATAG CGG   173

(2) INFORMATION FOR SEQ ID NO: 1871:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 104 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1871:

GCTGTGGGAT TGTCCTTTGG CATGGGGTTA GGGAGAGCGT TTCTAAGGGG CGTTTGAAAG   60

CCATTGATCC GTAAAAGGAC CATTGTTGGA AGCnGCCTTA AGAA   104

(2) INFORMATION FOR SEQ ID NO: 1872:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 64 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1872:

CCATTATCTC AAGAGGTTCT AGTAAGGGGA TGGCATTTGC TTCTTATGAA TTTGACCAGA   60

ATAA   64

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 377 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1873:

```
GACAACCTAT TGTTTCCCTA CCATACTGTT GTCCGGTTTG ACAAAACGGC GTTCCACAAT        60

CCATACATCG TGCACCTTGG ATAGAGGCAT CTTCTTTAGT AAATCGTTGT TGATATGCTT       120

TATGATGCTT CAAACGGTCT ACCAGTGATA ATTCACCTAA GTACTGTTTG TCATACTTCA       180

TAAATCCTTT AAATTCACCC ATCGTATCTC CCCCTTTCCT TAATACACAA CGGCTGGTTT       240

ATGTTTAGCA TCGATTGTTT TGACTGTnCA TCGTAAAATG CAGCTAACAT CGCTTCATCT       300

TCCATTGTCA TGTGAAGATT TTGTGGCAAA nGGAATTTTT TGCATCAATG AATnGGTGAA       360

CCTTTGGGGG TGACCTT                                                      377
```

(2) INFORMATION FOR SEQ ID NO: 1874:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 78 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1874:

```
ATTATCTGAA TACGCAGCAG TTGCAGCACT TGATGGATCA GCAGTATTTA AAAGAGGTTA        60

ACACATTACC CAATAGTG                                                      78
```

(2) INFORMATION FOR SEQ ID NO: 1875:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 256 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1875:

```
CTAAAAGAAG TTAAAGAGTG TGATGGTAGA ATTATATTAT TTATTGATGA AATgCCATAT        60

GCTTGTAGGT GsTGGTAAAA CAGATGGTGC CATGGATGCa GGCAACATGC TAAAACCAAT       120

GTTAGCACGA GGAGAGTTAC ATTGTATTGG TGCAACAACT TTAAATGAAT ATCGAGAATA       180
```

TGTTGAAGAT ACAATT   256

(2) INFORMATION FOR SEQ ID NO: 1876:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 286 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1876:

AGCGCGAAAT TGAGCAAGCG GAACATGCGA CTGATGAAGA AAAACAAGTT GCTTTAAATC   60

AATTAGCGAA TAATGAAAAA CGTGCATTAC AAAACATCGA TCAAGCAATA GCAnATAATG   120

ATGTnAACGT GTTGAAACAA ATGGCATTGC TACACTAAAA GGTGTACAAC CTCATATTGT   180

AATTAAGCCT GAAGCACAAC AAGCAATaAA AGCAAGTGCA GAAAATCAAG TAGAATCAAT   240

AAAAGATACA CCACATGCAA CAGTTGATGA ATTAGATGAA GCGAAT   286

(2) INFORMATION FOR SEQ ID NO: 1877:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 74 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1877:

ACTTCCAAAC ATGATAAAGA CAGACTACTT CACAGGTTTA AGGGAAGCAA CCACATTAGC   60

GGGATTCACC CTAT   74

(2) INFORMATION FOR SEQ ID NO: 1878:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 52 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1878:

TTTCATTAAG TTCAAAAAAT CTCAATAACT TTAAGGATTG GTCCGCATAT TA   52

(2) INFORMATION FOR SEQ ID NO: 1879:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 60 base pairs

```
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

5

```
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1879:

ATACCCCTGA GATTAATTAC TTGTCCTTTT TTTAGAACAA CATCTCCTGG CTTTGTTTCG          60
```

10

```
(2) INFORMATION FOR SEQ ID NO: 1880:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 60 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

15

```
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1880:
```

20

```
AATATCATTA ATAATATCAT TGATGCAAGT CCTATTGTGC ACAACTGGGG TGATTGCCTT          60

(2) INFORMATION FOR SEQ ID NO: 1881:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 56 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

25

30

```
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1881:

ACAATGGCAC ATGGACTTAT GCCTGGGGTG TCCTGTTCGT CGCAGCATCA AAATGA          56
```

35

```
(2) INFORMATION FOR SEQ ID NO: 1882:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 121 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

40

45

```
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1882:

TGCAAAGCAT TGGCACATGG CCAGTCAGTT TTACAACGTC GTGACTGGGA AAACCCGAGA          60

nGCGACGTTG TAAAACGACG GCCAGTGCCA AGCTTGCATG CCTGCAGTCG ACTCTAGAGG         120
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50

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A                                                                          121

(2) INFORMATION FOR SEQ ID NO: 1883:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 56 base pairs
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55

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1883:

ACATTTAATG TATAACCAGT TTCAACATTG CCGATTTAGT GGCAGCAGTT GCAGGA   56

10   (2) INFORMATION FOR SEQ ID NO: 1884:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
15   (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1884:
20

TGCATCCATT TGATTGAATT TTATGTTTTG ACCAAAGCCG GTTGCAATGT AC   52

   (2) INFORMATION FOR SEQ ID NO: 1885:

25   (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

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     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1885:

TGAAAAGTGG TGGAATGGTG TTAAAAGTTG GTGGGTAATT TTAGAGAAGA G   51
35

   (2) INFORMATION FOR SEQ ID NO: 1886:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 95 base pairs
        (B) TYPE: nucleic acid
40   (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

45   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1886:

TACACGAACC ATACTCACCA GGTTTTCGTG TCATGAGGCG ATATTTTTTG TCATTTTATA   60

TACATTTATC CAAATTCATC TTTTAAATGT TGAGT   95
50
   (2) INFORMATION FOR SEQ ID NO: 1887:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 65 base pairs
        (B) TYPE: nucleic acid
55   (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1887:

GCTACCAAAG GCGTTTTACC TATTGCTAGT CACTGCAAGT GGCTTAGCTA TGCAGATCAA   60

CTGGT   65

(2) INFORMATION FOR SEQ ID NO: 1888:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1888:

GTGGGACCAA CTGGCCGGTG ACGGTGGTAA AGGTGCTTCA GTCGTATTGA AGTGGGATGA   60

(2) INFORMATION FOR SEQ ID NO: 1889:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1889:

TGTTGGAGAA ACAGTTAACG AGGTTTAATG TTAAAAAAGC AACGTATCAT GGGTATA   57

(2) INFORMATION FOR SEQ ID NO: 1890:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1890:

TGGGATCTGC TTGCAAATAC ACAAAACTTT CTGGATTTTA TTACAATTGC AATATAATCA   60

AACA   64

(2) INFORMATION FOR SEQ ID NO: 1891:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1891:

GGCATCCACT CAGATAAAAT AAAGATGTCA AAAAGGCAAA GATGGTGCTA AAAAAACAA   59

(2) INFORMATION FOR SEQ ID NO: 1892:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1892:

GGTATCTCAA CGATCCTTTA GGTTAATTCG GAAATTTCTA CACGTGAGTT AGCA   54

(2) INFORMATION FOR SEQ ID NO: 1893:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1893:

TTGTCTTGGC AATGGCAGAG CAACAGAAGT TTAAAGTGCT TGCTGATCAT AT   52

(2) INFORMATION FOR SEQ ID NO: 1894:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 79 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1894:

TAAACCTATA CCCTGTAAAA AGAAAAATCG TGGATCGAAA GAACATGTAT GTGGCATTTA   60

TGATTGATGC TCAAGCAGA   79

(2) INFORMATION FOR SEQ ID NO: 1895:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 377 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1895:

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TTATAAAGGA GAGAAATCCT TAATTATGAA TAAAGCATCA TTTGATAAAA AAGTTAAAAA        60

GCAATTATGG TTTTTGAACA AGAAGGAGAA ACAAGCATTA GATCAACGAT TGTCTTCTAT       120

ATCTGATGAT GACAGCGTTA ACTTAAATAA GCCTGTTACC TTTGCTAATG CTTACTTAAG       180

ACAAAATGTA TTTCGAAATA AAGAAACAAA AAGTTATAGT ATGTTTGTTA CATTAGTAGT       240

GATGATGTTT GCTTATGTTG CTTTATTAGG TTTGTnTTTA TTTGGGCTAA TTACAAGTCT       300

ATCTGGCGTA CAATTTTTCG TTAGTCCTAA GGTAGATTTA TCTACnACTG TTGTTATTTT       360

AACAATnATT GGAGCGA                                                      377
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(2) INFORMATION FOR SEQ ID NO: 1896:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1896:

```
TTAGGATCCG TCTTTGCCGC AGCGTGGGTG TTCCGCGAGC GCTTCTTAGA GGTTTTGC        58
```

(2) INFORMATION FOR SEQ ID NO: 1897:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 445 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1897:

```
ATCGCTCAAA CCGAAATTGA AAATGCATCT ATTACTTCAT TAAGCCGTTT ACCAGACGTT        60

ATATTAGCAT TGAAAGTGG AAAGGTTGAA GGTGCTGTAG TTGAAAAACC TGTAGCAGAA       120

GCATATTTAA AACAAAATCC TAAATTAGGA ATTTCCAATG TGAAATTTAA TGAAGAAGAA       180

AAAGATACAG TGATAGCAGT GCCAAAAGAT TCACCAAAAT TATTGTCACA AATTAATAAA       240

ACGATTAAGG AGGTTAAAGA TAAAGGATTA ATCGATAAAT ATATGACTAA TGCTGCAAAT       300

GCGATGAATG ATGACAGTGG TTTTATTTCT AAGTATGGTA GTTTTTTCTT GAAAGGAATT       360

AAGATTACAA TATTAATTTC ACTTATCGGT GTTGCATTAG GTTCTATTTT AGGTGCATTC       420

GTTGCGTTAA TGAAATTAAG TAAAA                                             445
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(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 101 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1898:

ACCTTTTCAA TGTTGCTTTG ATATAAATTC ACAAAGTTGA CTTTTnAATT CTTCAATAGA   60

TTCTCTACTG CGATAGCTGA ATTGCCATCT TTTCTACTAC T   101

(2) INFORMATION FOR SEQ ID NO: 1899:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 75 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1899:

TGCCCTGGAT GCCTTTAACT TGATTCATGA CCTGTGGTTT TATTTCAATT TAGATGAGCT   60

ACCTTCAAGA CCTTC   75

(2) INFORMATION FOR SEQ ID NO: 1900:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1900:

AGCAATACGG AACTGATGAA CGGAATTGTA ATACGAGAAT ATGAAGCATC AACG   54

(2) INFORMATION FOR SEQ ID NO: 1901:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1901:

AGTACCTGAG TATCGCAGAC CGGCTTCAGG TCGTAGAATT TCTATACGTG GAGCTAGAAG   60

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1902:

GTCTAACTAC AGCATGCCGG CTTATTGTTG CACTTTCTCA ATATTCCAT A   51

(2) INFORMATION FOR SEQ ID NO: 1903:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1903:

GGATTnAAAC GTGCATTAAC GCGTGTnTTA AATAGTTATG GTTTAAGTAG   50

(2) INFORMATION FOR SEQ ID NO: 1904:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1904:

ATCGTATTTA TTTCAGCGAG TAGCGGTAGC CTTCAATACA CAAAGATTTT ACC   53

(2) INFORMATION FOR SEQ ID NO: 1905:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1905:

ATAAGACGCT AGATCTGGTC AATTTATTTC CGATTTTTTC AACACTATTC   50

(2) INFORMATION FOR SEQ ID NO: 1906:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1906:

TTCATCTGAA TCGTCGGCTT TCGCGATTAC TTCTTCGTCA GGGTTGCTAT C 51

10 (2) INFORMATION FOR SEQ ID NO: 1907:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 55 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1907:
20
CAATTGCTAA TAATCCTTTT AAGTCATTAA TGATTTGATC TTCCGTAATG TTGAA 55

(2) INFORMATION FOR SEQ ID NO: 1908:

25 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 53 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1908:

TTGCCAAACA GACATGACTT AAATTTCAAT ATCTTCTTTG ACTGCATCGA TAT 53

35 (2) INFORMATION FOR SEQ ID NO: 1909:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 94 base pairs
(B) TYPE: nucleic acid
40 (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1909:

TGAATTTCTA TACAATTATG GGGAAGGGTA TTGGTGAATT GGAATGGGCT CCTAAGTTTA 60

CAAGCCCCCA TTCGATGGCC GTTAAAGTTT TTAA 94

50 (2) INFORMATION FOR SEQ ID NO: 1910:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 66 base pairs
(B) TYPE: nucleic acid
55 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1910:

5 AACATGATCG TGGGGGGATG TTATGTTTGT TCATATATTT AGGAAGTCGT TTGTAGTTAT   60

TGTTTG   66

(2) INFORMATION FOR SEQ ID NO: 1911:

10   (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 55 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

15

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1911:

20 ATCTTCGCTC CACTTACTGC AATAAGGATT TGCGGCAATC CTAAACCGTT TTTCA   55

(2) INFORMATION FOR SEQ ID NO: 1912:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 59 base pairs
25   (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

30   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1912:

AACAATCGTA ACGATACAAC GCAATCTTCG AAAAATAATG CAAGTGCAGA TTTCCGAAA   59

(2) INFORMATION FOR SEQ ID NO: 1913:

35   (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 51 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
40

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1913:

45 ACACCACACA CACACACACA ACACCCCACA CAACACACAC AAACACACAA A   51

(2) INFORMATION FOR SEQ ID NO: 1914:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 111 base pairs
50   (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1914:

TGTTACGACT TGGTCGACCT GGCAAGCGCT TCGCGCACGT TCTGCAGCnT CTCACTTATT   60

GGTATCGCGA TGCGACGTTA AGAAATTTCG GAGTTCTGGT CACCTTATGT T   111

(2) INFORMATION FOR SEQ ID NO: 1915:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1915:

TGGTCCGCTC TCAATCGCAT CTTCAGGTTT TACTTGGCAA AAGAGCGCGG TGCTCA   56

(2) INFORMATION FOR SEQ ID NO: 1916:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1916:

GCCGACAGTA AAATAAAGGT ACTTGATATA ACATATAACG GAAAGCAACA GTTACTGTCA   60

CA   62

(2) INFORMATION FOR SEQ ID NO: 1917:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 103 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1917:

ATGATATTTA TTTGATTGAA GAGATGTTGC TTAAACAAGA AGACGTACAA TTGATAnAAC   60

GTAAAGATTA TATTCAGCAC CCTAAAGAAA ATGGTTACCG CAG   103

(2) INFORMATION FOR SEQ ID NO: 1918:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1918:

CAGTGTAGCG TGTGTCATGC CGTTTTACCA CAATTGAAGA CTGAGCTCTA TCCCTGTGCC   60

(2) INFORMATION FOR SEQ ID NO: 1919:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 117 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1919:

TCAAATTAAC TTCCAACAAA AACAAATGCA AGGTGAAGAA ATTGCTGAAG AAGATTTACA   60

AAAAGCGCAA GAACAAGCGC AAGCAATTGA AAAAGATGAA AACATCTCTn CATTAAT   117

(2) INFORMATION FOR SEQ ID NO: 1920:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1920:

TGCCTAATGA AACATTTAAA AATATTTTTA AATATATCTA TCAACACATC GTTCTATTAA   60

TTGGGATTGT TAGTTTTCTC AAAGGATTTT TAGGATTTTT CATGGAAAAA AATGGAAGTA   120

ATTTATATTT TGTTTCATTC CCGTTTTCAG TAGTCGTTGG ATTCTTTATT GTCTTTTTAT   180

TTATATGGTT TAGTTTTAAA ACAATACAAC TGCAGTGTTT TAACAATTCA AATTGGATAT   240

GGATATTCAC CTATTTAGCA ATCATTCTAC TAATTGTAGG ATTTTTCTAT GTATTCTTTA   300

TTCCACAATC ATTACTTGCC TTTGGACCAT ATATTCAGGT AAGCAATTGG GTATTTATTA   360

TATTTTCATT TATAGTTATG CCTATnGGAT TACGCATTGA   400

(2) INFORMATION FOR SEQ ID NO: 1921:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 122 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

TCACAGTCAT CATTTnATTT TCGATTTTCA ATAATTGTAT TTTTAATTTA TCTTGATATT   60

CATTAAGATT TATACAAGCT ATCTTTAACA TTGCCTTATC TTTGATATAT TTCTTGCATT   120

CG   122

(2) INFORMATION FOR SEQ ID NO: 1922:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 410 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1922:

AGAAGATACC ATACACATTT aATTAGTTAC AGCATAAATC AATTTATACC CTTAATTATT   60

ACATTGTTTA TATTTTAAAT TCGGGGGAGT AATTTTAAGT AATATCTTGT TGCTGCTAAT   120

TCTATTGTTA ATAAATTGAT ATTAGATGTA GAAATTGAGT GTGAAAGTTA ATAATAGATG   180

ATTTAGCTAG TAACATAATT AATTCATATA TAGTCAAAAA GTTCTGTTAG ATACTGTTCT   240

TGATGAATAT TCTTTGATGT TAGGTGTTAG CTATTCTAGA TGAGTTTCTT AGATGTGGAT   300

GCCTGTCTTG ATGAAGTTAT CTATGATGTT AATATAATAC TTGATGTTGA TTCTTAGATG   360

TTAGTGCGAT TTCAAGATGC TGATTCTTTG TTGTTGCACT ATCTTGGTGA   410

(2) INFORMATION FOR SEQ ID NO: 1923:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 348 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1923:

TTTCTATGGT TTATCAGGTG ATTTTACGGA AAACAGTGAA GATTATGGCG TATACCGCTT   60

TAAACGTGGA TTTAATGTAC AAATCGAAGA ATTAATAGGG GATTTCTATA AACCAATTCA   120

TAAAGTGAAA TATTGGTTGT TCACAACATT GGATAAATTA CGTAAAAAAT TAAAGAAATA   180

GATGTAAATG ATGTTAGGGC TTATAGTnAT TGATACTATA GGCTCTTTTT TATATGTTTT   240

TTAATAAAGC CTCGAATAAT GATATATTAA ATGACAAGTT TAACAAGTGA TTGCAATAAA   300

TATAAATnTG AATTGCACAA CCGATTTGnA AATGATTGAG TTGAGGAA   348

(2) INFORMATION FOR SEQ ID NO: 1924:

           (A) LENGTH: 253 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1924:

AGGGCAGATT TAAGCTAACT TGGAATGTTT TCGAGTTTTT GAGTTAGTTC TCTATCCATT   60

TTTTCAGTTA CATGAGTATA TATGCGAATG GTTGnTTGTT CATCTACATG TCCTACCCTT   120

TTCATAATTG CTTTTAAAGA AACATTCATT TCTACTAATA AAGTTATGTG TGTATGTCTA   180

AATGTGTGCG TGGTAACTTT CTTATTCATA TTTAAAGCTT TTGTACGTTT TCTTAACGCA   240

CACCGGCCAT TTC   253

(2) INFORMATION FOR SEQ ID NO: 1925:

      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 52 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1925:

GGTATAGGTG CAAGTCCTAT CTTCCGCTCC ATGGTTTAAT GATAATGCGG GA   52

(2) INFORMATION FOR SEQ ID NO: 1926:

      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 84 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1926:

TGGTCACTGT TCCTGATGCT TACGTTAGAA TGTAAGATTC CCGATTTATC AGTTATATAC   60

TGTTTGCTTC ACTTTGGAGA TCTG   84

(2) INFORMATION FOR SEQ ID NO: 1927:

      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 56 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

CTTTCTAAAT AATTCTAGTA TAGTTTTTAT TCAAATACGC TAGGCTCAGA GCTATT   56

(2) INFORMATION FOR SEQ ID NO: 1928:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 138 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1928:

GCAAATTGTC ATTAGACGGA GTATTATTTA GAATTTTCGG TGATATCCAC CGGCACAAGA   60

TCGATGTTGG ACAATATCTA ATATACTGAT ACGCATTTAA ATAGAAGAAG GGAATTAGAG   120

TTTGGTTnTG AATGCAAA   138

(2) INFORMATION FOR SEQ ID NO: 1929:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 52 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1929:

ACATCTTTAT ATGCTTCAAC ATCAAATACA CCACATATTG GTAAACAACA AA   52

(2) INFORMATION FOR SEQ ID NO: 1930:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 51 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1930:

TTTAATGTTC ACAACACCGG AATAATAATA ACTAAAGCGC CGCTAATAAA T   51

(2) INFORMATION FOR SEQ ID NO: 1931:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

ACGAAAAATA AATAATCATT TCACCTTTAT AGCCAGTATT TTTAATTAAT ATATTTTCAT   60

CTATTAGCGC TTCTAAAAAT CTATTTGACT TTTGAACATA CTCTTTAGCT ATATTATTAA   120

CAACAGTATA GGATTCCTCA TAATTTAGTT GATTAAATTC TGAGTCGTTC ATTAATTCAA   180

CTAATCCTTT TATTACTTTT TGTACAACAT TAATATTTTT ATCAAAATCA AATTTATCTT   240

CCTTAGATAA ATTAATAnnn AAAGTCTTAA GAACATTTGT AAATAGCTCT GCAACACTTA   300

TAGTTTGGnC AAATTCCTTA AATTTATTTA CACAGTACTC ACACATTAGT TTTAAAAATA   360

ATGGATTGTT GAATTCTGGA TTTAATATAG GTAACTTAGG   400

(2) INFORMATION FOR SEQ ID NO: 1932:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 100 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1932:

ACTTGCGGAA nGACGCAACG TTTATGTACG TTGGAAGAAA AATTCAGGAC TTACGTTCAA   60

AACTACCATA GCAATATGCA TTGAAAGATG ACAGTATGCG   100

(2) INFORMATION FOR SEQ ID NO: 1933:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 61 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1933:

CGCTCTGCTT TAAGCGTTGG GACTTTGTCA ACGGTAGTGG ATGGGAAGTG GTTCTGCTTT   60

G   61

(2) INFORMATION FOR SEQ ID NO: 1934:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 53 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1934:

(2) INFORMATION FOR SEQ ID NO: 1935:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1935:

ATGTATTACG GTTTAATTAA GCCACATACC AACAAGATTG CATTTATGGT ATCTCA   56

(2) INFORMATION FOR SEQ ID NO: 1936:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1936:

TCGCACCAGA AACAAGGGAT TGTTAAAATT GCGTAAATCC TTAAATTTAT TTGTAAATAT   60

A   61

(2) INFORMATION FOR SEQ ID NO: 1937:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1937:

ATGAATAATC ATATTTCTAA TCAAAGTAAT AGCATTTATA TTGTGTTTAA A   51

(2) INFORMATION FOR SEQ ID NO: 1938:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1938:

TTGCTGAAGA TAGAGGCTTC ATGAAGGTGG AGAAGTTAGC TGATTTCTGG AACAGG   56

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 51 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1939:

ATCTCAATGT ATTCCTCTAG TGTAAGTTCT TCATAAATAA CCGGTGATTC C   51

(2) INFORMATION FOR SEQ ID NO: 1940:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 318 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1940:

CTCAGGTCGA CTCTAGAGGA TCCCCTGTTA AATAAAACTT CTTAAGCACA TACTTATTTC   60

ACTATGCCTT TTACGTTCCC CTTATACTTT TCTCACATCT TTCTCTTAGA CTACTCCCTT   120

ATACGCCCCG CTCAATATCT TTAATCATTT CATCTACAGT TATTTTCGCA CTCGTTAAGA   180

CAATAGGAAC GCCTGGCACC TGGATGCGTA CTTGCACCTG cAAAATATAw ATCTTTATAA   240

TCTCGCGATA CATTyTGTGG ACGATAATAA TTACTTTGCG CTAAAGTTGG GCATTAAACC   300

GAATGCCGAA CCAAATTC   318

(2) INFORMATION FOR SEQ ID NO: 1941:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1941:

CCGGGAAAAT TTTTGGAATT AAGTGGAAAA AAAATCCCCT TAAAATTCCC CTGGCCA   57

(2) INFORMATION FOR SEQ ID NO: 1942:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 378 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1942:

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TGTTCTTCTT TTGAATCTGT TTTATTCGTT TGTTCCTCTT TTTTCTGTTC ATCTTTCATA      60

TTTCCACATC CCCCAATAAA AATGATTAAA AGTAATACAC TCATGTACAA AGCAATTTTT     120

TTTATATACT CCATCATTTC ACATCTCTCT GTTTTAATTT TATAAACATT TGAATATTTC     180

ATACAACTTA TTAAAATAGT GATTATTCAA CTTTTATGTT ATCAAACAAA ACTAACTTAT     240

TCAATTTAAT ACATGTAATT CATTTTAACT TTATTATTAA ATGTTCTAAC GTnATTTTTT     300

ATATTAGTAA TTATATTTAT TTATCCTCGC TTGGATTAAA GTAGATACTA TCTGTGAAGT     360

AnATATTTTC TGCCTTGn                                                   378
```

(2) INFORMATION FOR SEQ ID NO: 1943:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 394 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1943:

```
AAGAAGAAGT CAAAATTCAG CTAAGTAAAA GCTCGAGTTA TAAAAAAGTC TAAATTGATT      60

CAACAGGAGT AGAAAAGGAA ATTAGTCTTG CATATTTTAG AAAATGAATA AAAACAGTTA     120

CTATATGCAA CTCAAGAATT AAATATTATT TAAGCCACAT ACCTATTAGA GTACAAAATA     180

TACAAGTTGT ACTTATATCT AGGTATGTGA CTTTTGATTT TAAGCGTAAA GTAAAAGTTT     240

TTATGTTTGT ATTAGTTCTA AATTATTTTG CACTTGGATG ACACGTATTT TTGAGTTTAA     300

GTGGTGACTC AAGTTCAATA AAATAAATAT CAGATAGGAT AATTTGAnAA TnATATGAAA     360

GGGTTATCTC CAAAATnATC TCCATATTAT AAGG                                 394
```

(2) INFORMATION FOR SEQ ID NO: 1944:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1944:

```
TATTCGTGAT GACGATTGTC GGTGACATGA AGTTCTATTT GCTGGCACTG AT      52
```

(2) INFORMATION FOR SEQ ID NO: 1945:

           (A) LENGTH: 82 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1945:

CGTTTAAAAA ATGATATCAA TCTTTATTGT GGATTGCAAC ATCCGTGTGC TCCATAAAAC   60

GTGTGGCGAG ACTTGGGAAA GG   82

        (2) INFORMATION FOR SEQ ID NO: 1946:

           (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 70 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1946:

GTATTATTGA TGAAGAAACA GCTCTCCAGT TGTAGATGCA TGCTACGTTC ACGTTACCAC   60

TGTATCAATT   70

        (2) INFORMATION FOR SEQ ID NO: 1947:

           (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 50 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1947:

TATCACCAGC ACCAAGGnTA ATGACATGCT GATCTTTTGC AGTTATGGTn   50

        (2) INFORMATION FOR SEQ ID NO: 1948:

           (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 117 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1948:

ATTGTATGAA TCTTTGGGGA ATGAACTTTn AACGAACGGA CATCTTGCAA TGACGCATCA   60

AAATGGTTTT AACACATGTA ATCGGCTCTC GGTACTATTC GTGTGATGTA CACATGG   117

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 64 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

```
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1949:

TTTGATGATT TCGGGATGGA TTGGTATTGT GGTGAATGAA TTTTTTAGCT CATCATCAAA        60

TTAG                                                                    64
```

```
(2) INFORMATION FOR SEQ ID NO: 1950:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 57 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

```
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1950:

CTCTAGTGGC CATTCATATT TGTCGCTGAA TGATGTTGGT ACATCCATTG CTGCTGT          57
```

```
(2) INFORMATION FOR SEQ ID NO: 1951:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 68 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

```
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1951:

CTGTCCTTCT GAAACTTGGG TATTTAATTA GGAATAGTTA AAAAAATCAT TCACAGAAAC        60

ATTTAATA                                                                68
```

```
(2) INFORMATION FOR SEQ ID NO: 1952:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 106 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

```
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1952:

TTAAATTAAC CTTAAGGTTG GnATTTTTAA CCCCCAAATT TTTGGGGTGG TTAAAATTCC        60
```

(2) INFORMATION FOR SEQ ID NO: 1953:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1953:

GACATTTACA CCTGCTTCAA TCTGGTCCAG TGCAGCATCT AATTCTTCGA   50

(2) INFORMATION FOR SEQ ID NO: 1954:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 107 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1954:

ATTTGGCCAA CTGTTCAGCA CGGTATTGGT TCAATGCAAC ACTTTATCAT TGCTTCAGGG   60

CTATATCGGT GGTATGGGnT GTATCACTTC TTAGAACGTG GTATTAA   107

(2) INFORMATION FOR SEQ ID NO: 1955:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1955:

GAAGTGAATA TGAAGCTGCT AAAGACTCCG GAATGCTACC TCAGACAACT GATG   54

(2) INFORMATION FOR SEQ ID NO: 1956:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 365 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1956:

ATGATTATTT TAGTTCCATT TGTTGAGTCG ACTGCTAAAG TTCCATTTAA ATGTTGTACA   60

ATAAGCAGTA ATTTATGATT GTTTACAGTT TTTAATTTAC CATGAACTTT TGAAGCATTT   180

GCATGTTTAA TAACATTATT TATCGCTTCA CGCGTAATCA TAACTAACAT AGATTGTTTA   240

GTAGGACTTA ATACTTGCGC TAATTCTTTA TTTTCAAATG TAAAATCAAT ATCAGCATCn   300

nTnAAAACTT TACGTATACT ATCAATCTCT TCAATAAATG ATGGTAATTT TACATCATCA   360

ATAAT   365

(2) INFORMATION FOR SEQ ID NO: 1957:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 346 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1957:

AAATAATGTC ACAAAAGTTA AAGATACTAA TATTTTTCCA TATACTGGTG TAGTTGCTTT   60

TAAAAGTGCA ACTGGATTTG TAGTTGGAAA GAATACTATT TTAACAAATA AACATGTGTC   120

GAAAAATTAC AAAGTGGGCG ATCGTATTAC TGCACATCCA AATAGTGATA AAGGTAATGG   180

TGGTATTTAT TCGATTAAAA AGATTATTAA TTATCCAGGT AAAGAAGATG TATCAGTCAT   240

TCAAGTTGAA GAGCGTGCAA TAGAACGTGG ACCAAAAGGC TTTAATTTTA ATGATAATGT   300

AACGCCATTC AAATATGCGG CAGGGGCTAA AGCTGGTGAG CGAATT   346

(2) INFORMATION FOR SEQ ID NO: 1958:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 390 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1958:

TTTTCCAGTT AATTTTTCCA GTTCACTAAA TACTTTATTG ACTGTACCAG ACCCAATAAT   60

AATTTGGTAT TGTCCCCCAG TAGAAAACGT CCCTTTAACT ACATCCATAT TGTTTAGCGC   120

CTCTTCATTT ACTAAACTTT CATCATTTAA AACTAATCGT AGTCTCGTTG CACAATGCGC   180

CATTGCATCT AAATTCTCTT CTCCGCCTAT CGCGTTCAAA ATTTCTTCTG CGGATTGCTT   240

ATAATTCATA TATTTAGCCT CCTAATTAGA ACCGGTTCCA TTTATTCCAC TTTATTGTAA   300

CCGGTTCCAA AAATATTTGC AACACTCTAT TATCATTTTA TATAAACACC TACACCATTT   360

(2) INFORMATION FOR SEQ ID NO: 1959:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 50 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1959:

GATTGCATAT AATAGTAAAA ACATTACATC TTGAACAGTA CTCGTTTTGT   50

(2) INFORMATION FOR SEQ ID NO: 1960:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 57 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1960:

AATTTGAACC AGACACTGAT ACAAGTCACA CCCAGAAACT TTTAAGGACG TAAATGT   57

(2) INFORMATION FOR SEQ ID NO: 1961:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 50 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1961:

AACGCTATAT TAGCGATATA CAATGATGCC ATTATCAATA nTACAnCTGn   50

(2) INFORMATION FOR SEQ ID NO: 1962:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 60 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1962:

TACAACGTCA GTTGGCAGAC ACCAGAAGAA GGATTCATAA GTATATTCAG GAACTTGTTA   60

(2) INFORMATION FOR SEQ ID NO: 1963:

          (A) LENGTH: 50 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1963:

AATTTTTCCC CCTTTTTAAA TTTCCCAAAA AAAAnCCCCC AAnAAAAAAA   50

     (2) INFORMATION FOR SEQ ID NO: 1964:

          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 53 base pairs
               (B) TYPE: nucleic acid
               (C) STRANDEDNESS: double
               (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1964:

CAACAAGTAG ATGCATCAGA GAGTAGTGTT CAAACGTTAA TAGATGTGGC ATG   53

     (2) INFORMATION FOR SEQ ID NO: 1965:

          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 54 base pairs
               (B) TYPE: nucleic acid
               (C) STRANDEDNESS: double
               (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1965:

AGCAAAGGCA TAACTGCTAA TGACCATGTA AATGAGACGA GTCGATCGTG GCCA   54

     (2) INFORMATION FOR SEQ ID NO: 1966:

          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 252 base pairs
               (B) TYPE: nucleic acid
               (C) STRANDEDNESS: double
               (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1966:

CTCAAATAAC TGGCTCAACT CAACCGGTCT ATAACACCAT AACACCGCAT GCCACTCTAG   60

CATACTCAAT CGCTCTGGTA CCAGCnCTCA AATAACTGGC TCACGCCAAC TGTCTATAAC   120

ACTAACACGC ATGCACTCTA GCCTACTCAG AGCTCTGGTA CAGCACTCAA TAGCTGACTG   180

TCACAGTCCA CACACACTCA ATACTGGCTG ACACAGTTCA CACACnGCTT ACTCGCTCTC   240

(2) INFORMATION FOR SEQ ID NO: 1967:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1967:

CAGTTTAAAC TCGATGTTGT GTACTACTGT GCCAGCTGGA ATGTTTTATA ATGGTGATG   59

(2) INFORMATION FOR SEQ ID NO: 1968:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1968:

GTTACATGGC ATCACGCCAA ACCTGTCTAT AACACCATAA CACGGCATTG CC   52

(2) INFORMATION FOR SEQ ID NO: 1969:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1969:

ACAATTTTAA TTATATAACT CCAGGGGCTA CAGTAATACG ATTTCTCCAG ACTCCAAA   58

(2) INFORMATION FOR SEQ ID NO: 1970:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1970:

TGACGTATAA TGGATGAAAG TCTATTAAGT TTAAGAAGCT AATACTGTGA AATCTTTCT   59

(2) INFORMATION FOR SEQ ID NO: 1971:

          (A) LENGTH: 52 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1971:

TATCATGTTA TCTTCAATCG TTCACCAACA GTCATTTGCT GCATCAGTAA CG   52

(2) INFORMATION FOR SEQ ID NO: 1972:

          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 58 base pairs
               (B) TYPE: nucleic acid
               (C) STRANDEDNESS: double
               (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1972:

TTGCTGGTGC CATAGACTAC ACTTGTTTGA TATCAGAAAT GGGATCTGTT CCATTACC   58

(2) INFORMATION FOR SEQ ID NO: 1973:

      . (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 209 base pairs
               (B) TYPE: nucleic acid
               (C) STRANDEDNESS: double
               (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1973:

AGTTAAACCG AGTCCAACCC AAACCTCCAA TCCACCTAAT GGTTAAAATT CCAAACCATT   60

ACCAGGGAGG GACCAAAAAA CGGAATGGGG CCTATTGGTA GGGTACCTAT CCCATTTAAA   120

AATCCATCCA AAAGCCCAnA TTATCGGACC ATTTTCGCCA AAAATAATTT AAGCGGAAAT   180

TGAATACCTT AAAATTCTCn GGGCCCACT   209

(2) INFORMATION FOR SEQ ID NO: 1974:

          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 69 base pairs
               (B) TYPE: nucleic acid
               (C) STRANDEDNESS: double
               (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1974:

ATCTGAGTAT TTATAACATA AATCACTAAT ATCGTTATTA CATAGGGATA GGGTAAAAGT   60

(2) INFORMATION FOR SEQ ID NO: 1975:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 118 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1975:

TTCCTGCATC CGAGTCTGAA TCGCTGTCGA ATCACGTCGA GTCGATCGCT ATCAGGTCGA   60

GTCGCGTCGA ATCGnTCGCT ATCGAGTCGA TCGCGTCGAA TCGAATCACG TCGAGTCG   118

(2) INFORMATION FOR SEQ ID NO: 1976:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1976:

TTGCAACnTT TGATCTAGAT ACTACCTTAG TTGGATTGTA CTACTTGATT CTACTTCACC   60

TTTAGTTGGT TTTGTAGCAG GCGTTTTGTC TTTACCTGAC TCACTAGATG CGTCATTTTC   120

TTTTTCAACA CTTGGTAATT GTTTATTGTC ATCTTTTTGG CTGTCTTGTT TTTGTGATTC   180

TTTTTCAACA GGTGATGGTG TTGGTTTGCT AGGCGTACTG GAGTAGCTTC CTTCTTAGCT   240

GAGTTATCTT GTTGTTCTTT TTTGTTAGAT TTATCGGTAT TGGCTTTTGT AAATGCTTCT   300

nTATCAACGA TTCTGACATG GTATTGTCCA TCATAATCAA TCGTTTTTAC GTGAACTTTA   360

ACGATAGCAT CATATAGAGT TTACCTTCAA CATATGGGAA   400

(2) INFORMATION FOR SEQ ID NO: 1977:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 74 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1977:

TAGACAAAGA CAGTAACAGT AAAGTACGCT TCAGAACTGA TGGCTCACTG CGAGTATAAA   60

AACTTGTAGT GTCC   74

(i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 72 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1978:

ACTCAAAAAC TCGGAAAACA TTCCAATTTA GCTTAAATCT GACCCTTTTT TTGACCCTTA   60

TATTTTTTAC AA   72

(2) INFORMATION FOR SEQ ID NO: 1979:

   (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 69 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1979:

ATGTCATTGG CTTTGAACTT TATCTTCAAG CACCCAATCG TTTTAACTTT TCAAAATTTG   60

GCACCATAA   69

(2) INFORMATION FOR SEQ ID NO: 1980:

   (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 109 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1980:

CAGAGAGTTG TCGCTCATTA AACGCCACnT GATGAGTTTT CGCTTACGAA GTGCCACGCG   60

GTATGGATAA TTTTCACCTG TTGCTGAGTC TTTGATAAGC CTCGACTGT   109

(2) INFORMATION FOR SEQ ID NO: 1981:

   (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 55 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1981:

(2) INFORMATION FOR SEQ ID NO: 1982:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1982:

GAATCTGTTC AAGTTAGAAT TATCCCGGCA TAATGATAAA GGCGAGTAAA TGG   53

(2) INFORMATION FOR SEQ ID NO: 1983:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 252 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1983:

GnCTTTTGAA TAAAGAAAAA TTCATCAATA GAAAAACCGT CTTTATCGTC TATTTTTTTA   60

ACTAGTAAGT TCGGCGTTCT TAGAGACTCA AATATTGATT TTACGTTTTT CTTTGTTACA   120

CCACTAACAC TAAATATTCT TCCATCTAAA TCTACTAATT CTGGTACCGC AAAGACATCT   180

AAACCATGTG TTTTTTCTTT GTATTTATTT TCATCTTTTC CCAATAAAAA CACTTGGAAC   240

TTTTGATTTn GT   252

(2) INFORMATION FOR SEQ ID NO: 1984:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 63 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1984:

CGTGTTAATC AACTAATTCT TAGTTTTAAC TGTCGTAATA ATCAACTGAA CACTTTCAAT   60

CTA   63

(2) INFORMATION FOR SEQ ID NO: 1985:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 63 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1985:

TCCTAAAATG ACCGCTAATG CCTATGGATT GTTATCACCG ACCGCAGGGA CAGCACGACC   60

TAC   63

(2) INFORMATION FOR SEQ ID NO: 1986:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 112 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1986:

GGCATATAAA AATTAGAGAA ATTATTTCAA ATGAACAGAT AGAGGCACAA GATGAATTAG   60

TTAAACGATT AAACGATTAT GnTTTAAATG TCACTCAAGC AACTGTTTCT CG   112

(2) INFORMATION FOR SEQ ID NO: 1987:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 106 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1987:

TTTATCAATT TGTAACGAAC ATGAATTACA TGTTTCAGGA AAATATATTT CATCCCATTT   60

TTAAAAAGTA TAAGATTTTA TGAAAAATTA AACCAATTnA GTATAA   106

(2) INFORMATION FOR SEQ ID NO: 1988:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1988:

AATGGCGTAG TTACAGCATT TATGATTGTG TTAATCTTTT CTTCTGATAA ACATAATCTG   60

TTTGACCAAA AGTATTTAAG TGTTCAATTA ATTAGTTTTA TTATTTACGT CGTATGGCAA   120

GTTTTATTGA TAATGTTTTA TTATCATTCA AAACCAAAAA ATAATTCATT TTCAAAATTT   180

TGGTTAGGTG GACATCAGAT TCACTTCCAT GAAAGTAAAT TAATTGAATT TGTTGGTTTC   300

TTAGGAATTT CTTATGTTAC ATTCAAAAGT GTGCAGTTAA TTATGGAAAT TCGTGATGGT   360

TCTATCAAAG AAATTAAAGT ATGGAAATTA ATTCAATTTA   400

(2) INFORMATION FOR SEQ ID NO: 1989:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1989:

TTCAGCTTAC AATAATGAGC AGGTTGGGGT GGGCTCCAAC GCAGAGAATT TCGATAAGAA   60

ATTCCACAAA TAATACAAGT TGGCCCACTC CCATTCTGTA ATAAATATAG GAGGTCATTG   120

TTATGCAAAT AGAACTTACT GATGCAGCAG TAACTTGGTT TAAAAATGAA CTTGAGTTGC   180

CTGAAAATAA TAAAGTGCTC GTGTTTTTTG TAAGATATGG TGGCGAATTC CAACTCAAGC   240

AAGGATTTAG TCCTGCTTTT ACAGTTGAAC CAAAGGAAGA TGTTGATATT GGCTATGAAC   300

AACAATATGA CGATTTAAAT GTTGTCGTAG CGGAAAAAGA TTTGTGGTAC TTTGAAGATG   360

ACCACATTAT TGTAAATGTA GTTGTCACGA AGATGAATTT   400

(2) INFORMATION FOR SEQ ID NO: 1990:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 111 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1990:

CAATTTATTA TGTAACTAAT TATAGCATTG ATGAACAAGG CGCTCAACGT AATAnTACAA   60

TTAATGGATT GTTTCACAAG ATGGTAAAGC TAGGATGTCT TTTTATTAAG A   111

(2) INFORMATION FOR SEQ ID NO: 1991:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

TAAACAAATT CATCAATTGT TAGTGGCATA TCCTAATGTA ATTAGAGAGG AGTT   54

(2) INFORMATION FOR SEQ ID NO: 1992:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1992:

GAACGATAGA TTGATGAAAA GTTTAAAAAA GTACGTATAT GTTTATTAAG TTTGAGTTT   59

(2) INFORMATION FOR SEQ ID NO: 1993:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 73 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1993:

CGAGACCAAA ATATTCGAAC GAATAATTTC AGTGTTTTGC TCCTTTATTA TAGATTCAAG   60

CTATGGATAA TAG   73

(2) INFORMATION FOR SEQ ID NO: 1994:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1994:

ATCCATACAA ATGTAACAAG CACAATTGCn GCCATACTTn GCATGACAGT   50

(2) INFORMATION FOR SEQ ID NO: 1995:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1995:

(2) INFORMATION FOR SEQ ID NO: 1996:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1996:

TCAnTTAAnA TTAATGTnCG TTGGGGCTCT AATAAAATTT GTTTACAACG   50

(2) INFORMATION FOR SEQ ID NO: 1997:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1997:

TCATGATTTG AAATGACTTT CAATGACTTG GGTGGGACAC TTGTTGCACA GCTGGATGTG   60

C   61

(2) INFORMATION FOR SEQ ID NO: 1998:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1998:

CATGCATTGA TGnTCTCAAA GAACATGATG AAACAGGTCA nCACATGnCA   50

(2) INFORMATION FOR SEQ ID NO: 1999:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1999:

GGTTCGCTAC TGATTGGGTA TACATCTGAT TTAGCAATCT TGCGCACTTG TT   52

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 53 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2000:

ATGTGGTTAG ATATCTGCAC ACTTGAACGT TATTGTGGGA TATACTTGGC CAT   53

(2) INFORMATION FOR SEQ ID NO: 2001:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2001:

ATCTCAGTAA GGGTAAGCGT CAAAGTCTGC ACGGATGCTA ATGTTTACCA GGTT   54

(2) INFORMATION FOR SEQ ID NO: 2002:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2002:

CTAAAGATTG TAATGCTTGA ACAATTGGTT CAGTGAATTT TTGGAAATTG TGGAAACTGT   60

TACCATCATC ATCTGTTATA AAACTAAAGT TTAAATTGCC AGTATCATGA TAAACAGCGC   120

CACCACCAGA AATTCTTCTT ACTACATCGA TGTTGTGAGC ATCGATATAT GTCTGATTTA   180

CTTCCTCTAT CGTATTTTGA TTCTTTCCAA CAATGATAGA TGGTCTATTT ATGTAAAATA   240

AAAAGTAACT TTCTTCTGCT GGTAAATTTT TTAAAACATA TTCTTCCATT GCTAAGTTTA   300

AAGTTGGATC TGTAATATTA TTATTACTAA TGAATTTCAT TACAATCTCT CCCTTATATC   360

TATATATATn CTCTACTTAT TTATGCCTTA ACTTTGCTCA   400

(2) INFORMATION FOR SEQ ID NO: 2003:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2003:

CCGAAATAGG ACGGGCAGTT GGATTTATTC GAAATGGGTG GCGTTAATAT ATACAGT   57

(2) INFORMATION FOR SEQ ID NO: 2004:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 112 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2004:

nAGTAGTTGA AGGCGACCGC GGTCCACAAG CTGCAAACGT TGTTAAACTA TAATTCTTAG   60

ATTTGAATCA TTGATTTTAA CTAACACCTT ACCAAGAAGT AAGGTGTTTT TA   112

(2) INFORMATION FOR SEQ ID NO: 2005:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2005:

AAATCTTGAC ATAGGCACAG GAATGTATAT TGATCTCGAT CACTTAAGTC   50

(2) INFORMATION FOR SEQ ID NO: 2006:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 115 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2006:

AAGGTGGGTT TAAATTTCCC AAAAAAAAAA GCCTTTTAAC CTTTTGGGGG GTCCCCTTTC   60

CTTGGAATTG GAAAGGGGCC AAAATTGGAA TAAGGGGnTT GGAAAAACCC AAGCC   115

(2) INFORMATION FOR SEQ ID NO: 2007:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 105 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2007:

TGAAGAAATA GCAAATGAAC TCAATATTTC TATTGAACGT CAATATTTCA ACCAATTATA   60

TCGCTTCAAT AATCAAGATT TAAAGCATCT TGAACAAGAn TTTGA   105

(2) INFORMATION FOR SEQ ID NO: 2008:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 67 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2008:

ATTGGCTACT AAAGTTAAGG ACATGATGGA TTGGATTAGT GGTATGCGCT TTGAAAAGAT   60

CAATTAT   67

(2) INFORMATION FOR SEQ ID NO: 2009:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 73 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2009:

TATAAATTAG CGTCCTTCAT ATCACAACGA TGATGCTCTG TGCGAAGATC TGATTTATTT   60

CAATGTGCGC ACG   73

(2) INFORMATION FOR SEQ ID NO: 2010:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2010:

CTTTGTTTAT GTTTCGTTTA ATTTGTAACC CTCTCTTTGG ATACCGAGGT T   51

(2) INFORMATION FOR SEQ ID NO: 2011:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 88 base pairs

      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

5

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2011:

TAACGACCAA GCTTAAAGAG ATACGCTCTT ATGCGATTGG ATAGGTCGTT AAAGTTAACT   60

10   ACAATACCTC ATAAGTAGAT TTAGAATC   88

(2) INFORMATION FOR SEQ ID NO: 2012:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
15   (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

20

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2012:

GTCAACCCTT GCCAAGCTTA TATCACGATA CTGGGATGTG ACTTCCGGTG AATTAC   56

(2) INFORMATION FOR SEQ ID NO: 2013:

25   (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
30

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2013:

35   AGCTTATAGT ACTTGTGACT TCATAATGGA TGAAGTTGAA GTACCAAAAG AATTAACACA   60

ATTACACGAA TAATTTAAAT AGAGAGTGTG ATAGTAGGTG GAATTATTAA ATAGTTATAA   120

TTTTGTTTTA TTCGTATTAA CTCAAATGAT ATTAATGTTT ACAATACCAG CTATAATTAG   180

40   TGGTATTAAG TACAGTAAAC TTGATTATTT TTTCATCATA GTAATTTCGA CATTATCGTT   240

ATTTCTATTT AAAATGTTTG ATAGCGCGTC CTTAATCATA TTAACTTCAT TTATTATTAT   300

AATGnATTTT GTCAAAATCA AATGGnATTC nATTTTGTTG ATTATGGCTT CGCAGATTAT   360

45   CCATACTGGT GCCAACTACA TGGATATAGT TATATATGCA   400

(2) INFORMATION FOR SEQ ID NO: 2014:

     (i) SEQUENCE CHARACTERISTICS:
50   (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2014:

TCTTTCGAGG ACAGTAGAGG GTCCACCCTA TTGGACGTGG TACTGTACTA CTTTTAAA   58

(2) INFORMATION FOR SEQ ID NO: 2015:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2015:

TCTACCTGCA GGCATTCAAG CTTGGCACTT GCCGTCTTTT TACAACGTCG TGACT   55

(2) INFORMATION FOR SEQ ID NO: 2016:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 66 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2016:

TACTCTTAAG CTAACAACGG CGGTTATGAG TCCTTTGACA AGGTATCGGA GGAAAGACCG   60

TAAAGC   66

(2) INFORMATION FOR SEQ ID NO: 2017:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 105 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2017:

CCAATAAGCA CACTGCCATT ATTGAGGACG GTACATnTAC GGTTAGACCC AATTGTTCAT   60

GGCGGTGGGC ACATAGTGTT TGGCTTTGAG GAGGTTACCA TTGCC   105

(2) INFORMATION FOR SEQ ID NO: 2018:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2018:

CCTTCCAATA GTAATTGATT GATGTATGAG TATATTAGGT GTGAAATCAA GAGGATTC   58

(2) INFORMATION FOR SEQ ID NO: 2019:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2019:

TTTCCTCGTA GGTGGTTCTT CTTCATCTTC GTTGTTTTGT CCGAAGTTTG GA   52

(2) INFORMATION FOR SEQ ID NO: 2020:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2020:

ATAGTTTAGG TGAGGATGTT GnGGTACGAC AGGAAGAAAG ACGGCAAACA   50

(2) INFORMATION FOR SEQ ID NO: 2021:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 300 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2021:

TTGTCACAAT AATTTCTTCA GGATCATAGG AAAAATGATA ACGATTTTTG AAGTATTGAC   60

TAATTGCTTC GCGAGTTTCT AATAACCCTT TATTGTGAGA GTATGATGTC TTGTCATTGT   120

TAATAGCATC AATATATGCC TTTTTCACAA CATCAGGCAT CGGGAAGTCT GGTTGGCCAA   180

TAGTTAAATT AACACAATCA TCCAAATTAT TCATACGATT TGAAAATTGG CGATACTTGG   240

GTGGCTCCTA AAATAATTAG GAAATGAGGA nTTnAAGGAA GGTTTCCATT TnGTGGACAC   300

(2) INFORMATION FOR SEQ ID NO: 2022:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2022:

TCATCCAAAT TATTCATACG ATTTGAAAAT TGGCGAATAC TTGGTGCTCT TAAATATTTA   60

10

GAATTAGAAT TTAAAGAAAG TTTCATTTGT GACACCTCAA ATATAAATCA AATATTGTCT   120

AAAAATTTAG AAATTAATAA TATCATAACA TACTTTTAAA GCAAAAAAGG GTAAATTACT   180

TAAGCTTTAT TTGAAAAACG AAAAATGTCT AAATACACTG TAGTAACTAC TTTTCAAAAT   240

15

GAATAAAGTG GTTACAGTTA ATGTACTTAG ACAGTATAAA ATTATGAATC TTTAAACTGT   300

GATGGTCTTT GTAAATTAAT TATTGGATTT GTCCATTTAC AAACAAAGTT TGTAGATAAT   360

ACATATACGA TGATTACAGA TATACTTATT AAATAAAGAT   400

20

(2) INFORMATION FOR SEQ ID NO: 2023:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
25
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

30

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2023:

TTnAAATATA CCAATCACGT TCATCCACAG TGATCCTAGA CCAATCCAGA   50

(2) INFORMATION FOR SEQ ID NO: 2024:

35

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 66 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
40

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2024:

45

TTTTTAATGG TTTAAAAATT CCCTAATAAA ATTTTGGAAA ACCTAAATTC CAAGGGGTTA   60

AATTCC   66

(2) INFORMATION FOR SEQ ID NO: 2025:

50

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2025:

GTAAGAGCAA TGGCGCAAAA TGCCTGTAAT GATATTGTGA ACGTAATTGA ATCAGTAGAG   60

GACC   64

(2) INFORMATION FOR SEQ ID NO: 2026:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2026:

CTGTCGCTGC GTGACTTAAT TCTTTTGCCC CGTTGGCATA TGAGGAAATG TCA   53

(2) INFORMATION FOR SEQ ID NO: 2027:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2027:

CATTTCACTA TTATTGGTTT AGGGTTGTTC ACGTTCATCA TGACCGCACC ACA   53

(2) INFORMATION FOR SEQ ID NO: 2028:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 73 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2028:

CAACTAGACA TAGTATTGCT GCATTAATCA AGTCAAGCTG CCACACTAAG AATCGATGCA   60

AACGGAATCG TCA   73

(2) INFORMATION FOR SEQ ID NO: 2029:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 127 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2029:

AATAATAATT CTGGAATAGT GTTTAATACT TATTnTCCGT TTAAGATTTC AACTTAATAT   60

GGTTTACAGC GCGTAGCTCG TCTAATTCAT CATCACGTGT AGAGTGCTCT GCCTTATCAG   120

ATCAGTT   127

(2) INFORMATION FOR SEQ ID NO: 2030:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 61 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2030:

GCAAGTGAAT TGAAGTGACA TGTGGCTGGT GCTTCATGGT AATGATAAAC CAACACCATG   60

G   61

(2) INFORMATION FOR SEQ ID NO: 2031:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 78 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2031:

ATAAATATCT ATTTAGATAT AAGTATTGAT AAGTTGCTTG AATTTATAAA GTGAAGGAGT   60

AGGTGTCATT AGTATAGT   78

(2) INFORMATION FOR SEQ ID NO: 2032:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 229 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2032:

GAATAGTGTT TATAAAATGT TGACACTGTA GTGGCATATT GTAAATTAAA TATTATTATG   60

TGATCATTTT GTTTAAATAT TAGTTATAAG AAGTGAAATA nTCATTTTAA AAGGAGACTT   120

AAAACTTGAA ACGATCAACG AATCAAGAAA AATTTCTTGA TACACTAATT AGACTTAATA   180

(2) INFORMATION FOR SEQ ID NO: 2033:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2033:

TTTTGTCATC TGTATAGGTA TGCGCGCCGG TGTCTTTATT CACTTTGAAC TGTGCGT   57

(2) INFORMATION FOR SEQ ID NO: 2034:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2034:

AAGGCATTGG ATATAAGACT TGATGTTGCA TGGCAATCAC ACTGCCTAAT CCTTGCATAT   60

AA   62

(2) INFORMATION FOR SEQ ID NO: 2035:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2035:

ATGGCAAATA CTATACATCG TCCAATTGAT TGAAAAATAT GGTTATTAAA GA   52

(2) INFORMATION FOR SEQ ID NO: 2036:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 86 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2036:

AAGGTGTTTT TATATGCTTA TTACAAATAC TTAACGCGAT GAGTTTCTCA ACCAAATTGA   60

(2) INFORMATION FOR SEQ ID NO: 2037:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2037:

TACCCACCCC CAAACCCAAG GTTTTAAAAA ACCCCTTCCA AAAGCCCGGA AAAACCAAAA   60

GGAATTATTT T   71

(2) INFORMATION FOR SEQ ID NO: 2038:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2038:

GAATCCCGGA AGTACAATTT GGTACGTGAA GAAAATGGTA GTGGAATTAC   50

(2) INFORMATION FOR SEQ ID NO: 2039:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2039:

CAGTATCTCT TGGTATTTTA ATTGGTGCTT TATTAAACGT AATTTTACCT TTATATATCG   60

ATGGAGCGAA GAGTATTTTC GTATACGTTT ATAGTGCGTC TATTTTACCA GGTATGATTC   120

CTTGGTTTAT GATTTTATTC AGTCATTTAC GTTTTAGAAA ATTACACCCT GAAGAATTGG   180

AAGGTCACCC ATTCAAAATG CCTGGTGGCG CAGTAACTAA CTATTTAACA ATCTTATTCT   240

TAATATTAGT ATTGGTTGGT ATGGTATTTA ATGTTGAAAC TAGAATATCA GTGCTTATTG   300

GTGTCATCTT CTTAACGATT GTAACGATTT ATTATTTTAT TAGATATAAT AAAAnTAATG   360

TAAAGCAnAA TAGTATGTTA TAAnGAGCGn TACTTATGAC   400

(2) INFORMATION FOR SEQ ID NO: 2040:

         (A) LENGTH: 79 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2040:

AAGCTGATTT TTCTAAATGT TGAAAATCAT AAACTGCTTA ATAATAAATA ACGAGATCTA   60

AGTAATAGTG CTCCATTAA   79

(2) INFORMATION FOR SEQ ID NO: 2041:

         (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 54 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2041:

AATTGAACGG ATCGTTCCCA ACCGTTATCA ACCCAGACCG GTGTTTGAAC CCAA   54

(2) INFORMATION FOR SEQ ID NO: 2042:

         (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 50 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2042:

AATGGGATTG GTTCAAACTG AAATGGGCTG TTAGTCCCTG TAAAACCAAG   50

(2) INFORMATION FOR SEQ ID NO: 2043:

         (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 109 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2043:

ATTGGnATAA TCAAAGCATT GAATCATACA TAGTCACATT GATTGTTTCC TCAGAGTTTC   60

AACACTCTAT AACTCATTTT AGTAATTTGC TGATTGCGCA CTTCATGTG   109

(2) INFORMATION FOR SEQ ID NO: 2044:

        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

5

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2044:

10   TTTTATGGAG GTGATGAAGT GGGTGAAGCT GAAAGGAAGC AAAAGCTTGG   50

(2) INFORMATION FOR SEQ ID NO: 2045:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 101 base pairs
            (B) TYPE: nucleic acid
15   (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

20

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2045:

TTGGCCCCCT TCCAACCCTT GGAAATTTTA AAAGGCCAnT TTTGGGGTAA AACCCTTGGT   60

TCCAAGGACC CCCAAAAGTT TTTTAACCTT CCAATTATTA T   101

25

(2) INFORMATION FOR SEQ ID NO: 2046:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 100 base pairs
            (B) TYPE: nucleic acid
30   (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

35   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2046:

ACCCTTTCCA AAAAGCCCAT TTTGAATTCC CCAAAGGGAG CCAAATTTAA GATGGCCGCn   60

AAAAAGGACC GGGGGGTCCA TGTTTTAATT TAAGCCGGAC   100

40
(2) INFORMATION FOR SEQ ID NO: 2047:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
45   (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

50   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2047:

GTTAGTTATG AGCAACGTAT TAATGAAATT ATTGAGCAGT AATTnACCAG   50

(2) INFORMATION FOR SEQ ID NO: 2048:

55

                    (A) LENGTH: 56 base pairs
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear

5

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2048:

10   TACGTATTTT CAAATGACGT TGGTGGACGT CACACTCCAT TCTTCTCAAA CTATCG   56

        (2) INFORMATION FOR SEQ ID NO: 2049:

            (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 82 base pairs
15   (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear

20

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2049:

    TTTTCCCCCC CCCCCCCAAA TTGGGGGTTA AAATTTTAAA AAAAGGGGTT AAAGGGAAAC   60

25 CCCAATTCCG GTTAACCTTT TG   82

        (2) INFORMATION FOR SEQ ID NO: 2050:

            (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 51 base pairs
30   (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear

35   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2050:

    TCAGATGGAT GGCAGTTATT TGGTATTCCA TGGGTATAAA GATAGCATAT T   51

        (2) INFORMATION FOR SEQ ID NO: 2051:
40
            (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 55 base pairs
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear
45

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2051:

50 TGAACGGGAG AAAGATGTTG TTGCATGGTG TCTCGGAAAC GTTTGTGTCC ACGTA   55

        (2) INFORMATION FOR SEQ ID NO: 2052:

            (i) SEQUENCE CHARACTERISTICS:
55   (A) LENGTH: 74 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2052:

ATACCTGGAT GCAAAGGCAA AGTCGCAATT TTCCCTGTTC TAATGTGTCT AACTTCTCTT   60

CTAAAGTTCA GGTT   74

(2) INFORMATION FOR SEQ ID NO: 2053:

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 51 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2053:

AATCTTGTCT GATGTAATGT TCAGGTCCCT TGACCCTCAT ATGCATGAGG T   51

(2) INFORMATION FOR SEQ ID NO: 2054:

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 52 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2054:

CATCGACTTA TAGCTTAATT ATTATAAAAA ATTTCTCCAG ATTTAACTTT CT   52

(2) INFORMATION FOR SEQ ID NO: 2055:

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 400 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2055:

ACTGACACAT TATATTAGTG AATTATTAAA AAATGATGAG AAAATTAAAA TCATCATGAA   60

TGAATTCGGT ACTTTTGATA TTGATAGCAA TAGTATTTCA AATGAAATTG AAGTCCATTC   120

ATTGATTAAT GGTTGTGTTT GTTGCGATCT TAAACAAGAA CTTGTCTATG AACTAAAAGC   180

CATTGCTTTA AAAGGGGACG TTAATCATGT CATCATAGAA GCGACAGGCA TTGCGCATCC   240

TTATTTATGG TGTATTAGAT GCGACTCGAT TTTTAGAACG TCATCAATAT ACCGAAAAAT 360

ACAGTTTCGC TGGATGGGGA GGATCCAGTT GGAAACTAАn 400

(2) INFORMATION FOR SEQ ID NO: 2056:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2056:

TCAAAACTTT GAAGTTGTGC TTGCTTTGCA CCATTTTTAA AATGTTCAGC TGAGAGTATA 60

TCTTCCGCTG TAAAATTTAC TTCTCCTGGA CTTAAAGATT CAATTAACAA CCAAGCCGAT 120

AACGTATCAT TTAGCAATTG ACTCATGAAA TCCCACCTTG TTCCCTATTT GTTTTTTACT 180

TAATGCTATT TTAACAAATA ATTTAATCAT ATTAGTGTTT TTTCAAAAAT ATTCATATAT 240

TATCATTACC ATATTTATTC AACAAATGTT TGTAAAATCC TCACTAATAA AATTAATCGA 300

TATGACCATA ATTCATTATC CAATAAATGA CTATAAAAAT TTCTnCTATG CCTTCATTTG 360

CAACTAAATT TGGACATCAA AAAAGAGCAC TCCTGAATGA 400

(2) INFORMATION FOR SEQ ID NO: 2057:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2057:

TTGTTGTTGT GATTTCACAT TTTCAAAATT TTGTTGCATG TTGTTAACTT CATAAATTAG 60

TGATTCGACT ACATCATTCA TGAGGACGCC TCCTACATTT TTTAATTTAT CACAATATAC 120

TGTATTCGTC ATGTTTTAAC ACTCTATATA ATTTGATTTA ACTATTTTTT CAAATGTGTT 180

ATCTGTTAAA TCAAGTAAAT CTAAAAACTT CCTATATAAA TACAAAATTT TATCGTGTAT 240

GTTGTTATAC GATGAAAATA CTTTTAATCT AATAAAATCA TTTAAATCAA ATACACCTCT 300

GCTGATTAAC AACACATACT TGTACTTGCC TCAAAAATAA AAATTACTAA TCATGATTTG 360

ACTTTTATAA CAAAATTCAA AAATATTGTA ATGAGTATTC 400

(2) INFORMATION FOR SEQ ID NO: 2058:

```
           (A) LENGTH: 400 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear
```

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2058:

TCTTTTTACT CGCAATTTTA GGAAAAATGG TTGGATCAAT TGATAAAACC GGAAAATTAT   60

TAACAATAAT CAATAAAATA TCAAGCATAA TAATTATTAT TGTTGCTCTG ATGATATTAC   120

AAAAACTTAT TCAATTATTA TTCTAAAGCG TTATGTAGTT GTATTTTAAA AGCGTTATAC   180

AAAAGACATA CTTGTGTCTA TGTATAACGC TTTATTTATT ATAAATTTGG ATCAATTAAC   240

TCAACAAATT TAAATGTTCC ATTGTCATAT TCAAATTTCA GGATATTACA ATTACCGATA   300

TTATGCTTTA ATGCTTCATC TAGTTTAAGG CAATATCTTA AAAATACCnC CCTTAnTGGT   360

CCATGACTCA CGACTAATGC ATTATTCTTT GGTTTGAGAC   400

    (2) INFORMATION FOR SEQ ID NO: 2059:

           (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 51 base pairs
               (B) TYPE: nucleic acid
               (C) STRANDEDNESS: double
               (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2059:

AAAACAACAC AATCAAAAAT ATTGGATACA ACTGAAAAGT TATCAAAGCT A   51

    (2) INFORMATION FOR SEQ ID NO: 2060:

           (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 50 base pairs
               (B) TYPE: nucleic acid
               (C) STRANDEDNESS: double
               (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2060:

TTATCATGTT TAGTAGATTT TAAGAAGCTA GAACATTGTA GATATGATGA   50

    (2) INFORMATION FOR SEQ ID NO: 2061:

           (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 50 base pairs
               (B) TYPE: nucleic acid
               (C) STRANDEDNESS: double
               (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2061:

AACGTCGTnA TATCAnCTTG CCAAACAAAG ATATTGTCAC CTTTTATCGG   50

(2) INFORMATION FOR SEQ ID NO: 2062:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2062:

ACCATGGTGn ATATGGTCAT GATGATCGTT TGTGCCGGGA GCTTGAGCTG   50

(2) INFORMATION FOR SEQ ID NO: 2063:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 81 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2063:

TTTCCCTTGG TTTTGGAATT TAACCAAATT TGGGAGGGAT TTGGGACCAC CCCCAGGATT   60

TTAAAAAAAA AAAATCCCAG G   81

(2) INFORMATION FOR SEQ ID NO: 2064:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2064:

TTTTGGGGAC CTTAACTGGG TGGGTCTGGA ACTGTTTCCC TTTCAAACAC A   51

(2) INFORMATION FOR SEQ ID NO: 2065:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

ATGATGTATT CAAAAGGTAT CTATAAAATA GCTTTAGTTG GAAAAGATGA GA   52

(2) INFORMATION FOR SEQ ID NO: 2066:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2066:

TTTCATCACT GGCATCTTGT AATTTCTTGG TCTCATATCT GGAATTAATA GGT   53

(2) INFORMATION FOR SEQ ID NO: 2067:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 63 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2067:

AACCATTAAG AAATTGGATA CACAGAGCAA ATATGGTTAT GATTAGGAAC CATGGCATTT   60

ACC   63

(2) INFORMATION FOR SEQ ID NO: 2068:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2068:

AAAGGCAGCG ATGTTACTCA TACCGAACCT GGTTATATAT GAGCGATGAT GCAATGTA   58

(2) INFORMATION FOR SEQ ID NO: 2069:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 67 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2069:

AACAGGA 67

(2) INFORMATION FOR SEQ ID NO: 2070:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 86 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2070:

CATTTAACCC ATCTTCTTTT TTTAATTCTT CTATACTACG GTTTAAAAAC TCTACAATAA   60

CTGCCATTTC ATCATCATCA AAGACT   86

(2) INFORMATION FOR SEQ ID NO: 2071:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 381 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2071:

GTTTCTTCAA AATATGTGTA TTACCTTTTT GTATGGTTAA ATCTTTTAAT TCTATCATTC   60

TTGTCTTACC TCTTTTGGTG TATCCTCTTT TTCAACATAT GTGATCGATA TGACATATTG   120

CCCTTTATGC TTTATTTCGA CATACGTTCT ACTAGGTGAA AATCCATTAA ATGTTAATTT   180

ATAATCAAGC TTTTCCCCTC TTTCACTATA AGCCGTAATA TTAACATATT GTTGCGTACC   240

TTTTGGCACT TTGGCATAAC TATACTCCGT TTTTAAGAAA GGATTAAAAC GATCAAGTAT   300

AGGATGATGT ATGAnTGTAA AAGCAATAGT AATGGATAAT ATTAATCCTA ATAATATTGC   360

AATGATAAAT TTCATAGTTA A   381

(2) INFORMATION FOR SEQ ID NO: 2072:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2072:

ATCCCCGAAT TGCTTCGCAA ATGTATCATC TTCGAGGCTA CGTTACTTAA AT   52

```
          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 82 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear
```

```
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2073:
```

CCAAAAACAG CATCACTGTG ATTATGGTTT TCATCTTCTA TAACTAAGAA TACATGTTTT   60

TTTGTAAAAA TTTTTTTGAT CA   82

```
     (2) INFORMATION FOR SEQ ID NO: 2074:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 82 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear
```

```
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2074:
```

TTTATCGCAA TGAGGGAAGA TAAAGGATCC CGAAAGCGCC GTATGGGTTG GCAAACATTG   60

GGGACCAAGA CCGTTCCCCA TA   82

```
     (2) INFORMATION FOR SEQ ID NO: 2075:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 66 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear
```

```
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2075:
```

CTTGGTTGCT CTTTATTTAT TTAATTGAGA CCTAGAAATA AGTTATTAAG CACAATCATT   60

CACTTT   66

```
     (2) INFORMATION FOR SEQ ID NO: 2076:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 57 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear
```

```
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2076:
```

(2) INFORMATION FOR SEQ ID NO: 2077:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 326 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2077:

```
TACGTTCTAT CATAGAGCCT GGAGATGAAA TTATAATACC GGGACCAATT TATGCAGGCT        60

ACATACCACT CATCGAAGTA CTAGGTGGTA AACCAATTTA TATTGATACA ACAGCAACAC       120

AATTTAnAAT TACACCTGAT GCATTAGAAA GTCATATTTC TCCAAAGACA AGAGCTGTCT       180

TGTTAAATTA TCCGACTAAT CCAACTGGCG TAGTTTTAAA AAGAaAtGAA GTTyTArATA       240

TCGTAAATGT ATTAAAAAAA TATCCGTTAT TTATTATTAG CGATGAGATT TATGCTGAAA       300

ATACATTTAG TGGTAAACAT GTATCC                                           326
```

(2) INFORMATION FOR SEQ ID NO: 2078:

    .(i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2078:

```
ACCCCTTAAT TTAATTGATG TTTTGTTATT TTTAAAATGA ATAGTTGAAG AAAAAT           56
```

(2) INFORMATION FOR SEQ ID NO: 2079:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2079:

```
CACGTACTGC CATGTATGCA CAAGCCGGCA TTCATAAAGC CTTCCATGGC AGTCGTTATC        60

A                                                                       61
```

(2) INFORMATION FOR SEQ ID NO: 2080:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 94 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2080:

TGGGACAGGG CGTACCATTT CAAAATGATA GTTCTGAGCT GCTAATTAAT ATGCCTTCGA   60

10   AAAAGATGAG TTTAAATTTA GATGATGAGA CTGA   94

(2) INFORMATION FOR SEQ ID NO: 2081:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
15   (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2081:

AAGACGACAT GCAAGACATT GCCTTATCTA ATGACAATGT TAAAGCGAGT   50

(2) INFORMATION FOR SEQ ID NO: 2082:

25
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
30   (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2082:

35   TTGTTCGGCT AAAAATAAAG TGGCATTGAC GTGACCGCAA GTTGACGTAC   50

(2) INFORMATION FOR SEQ ID NO: 2083:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 133 base pairs
40   (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2083:

CTTCCCAACA TTGCGCACTG AATGGCGATG GCGCTGATGC GTATTTCTCC TACGCTCTnG   60

50   CGTATTCAAC CGCTATGGGC ATCTCATACA TCTGTCGATG CGCTATTAAG CAGCCCGAAC   120

CGCACACCGT GAG   133

(2) INFORMATION FOR SEQ ID NO: 2084:

55

(A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2084:

GGTAGGGGCA CTATTTTGTA TGTAGAGGTT TTGTCGGGCA GTGTGAAATC AACGACT   57

(2) INFORMATION FOR SEQ ID NO: 2085:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2085:

CCCCCCCCAA AAACCGCCCC CCCCAATTTG GCCTTTTTCC AAGGGGGGTG TTTTAA   56

(2) INFORMATION FOR SEQ ID NO: 2086:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 114 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2086:

AATAGCGAGA GCCCGACCAT CGCCTCCAGA TTGCGACTGA ATGGCAATGC GCTGATGCGT   60

ATTTCTCCTA CCATCGTGGT ATTCAACGAT ATGGGCACTC TCATACAATn GCTC   114

(2) INFORMATION FOR SEQ ID NO: 2087:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 80 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2087:

AAGGGGGAAA AGGAACCCAA GGCCCCCTTC CCAAGGAAAT TGGGGGGTTG GAAAAAACCA   60

AAAATTTTTT AAAAACCCGG   80

(2) INFORMATION FOR SEQ ID NO: 2088:

2141

                    (A) LENGTH: 66 base pairs
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
5   (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2088:

10   GGGGTAAGTG GTTGAGACAG GAACTTTACA AGAGGTGTTT CGTCATCCTA GAACGACGCT   60

     TGCTCA   66

     (2) INFORMATION FOR SEQ ID NO: 2089:

15   (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 62 base pairs
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear
20

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2089:

25   ATCAATGTAT TACGTATCGA AGGTGAATTA TATCATACTG CTAAATATGA CGGTTTCACA   60

     TC   62

     (2) INFORMATION FOR SEQ ID NO: 2090:

30   (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 50 base pairs
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear

35

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2090:

     GAATTCGCTA TCCTGAAATC CTGAGTCGCT GTCCTGAAAT CTGAAATCGC   50
40
     (2) INFORMATION FOR SEQ ID NO: 2091:

         (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 74 base pairs
                    (B) TYPE: nucleic acid
45   (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear

50   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2091:

     CGGGGTTCCC CCGTTCAATT CCCTTTGAGT TTTCAACCTT GCGGGTCGTA ATTCCCCAGG   60

     CCGGAATTGC TTAA   74

55

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 70 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2092:

ATTGTTGGGT ACGGTGGTGG GTTAATAATC CAAACACGTT AAACTACCCG TTTTAGATAT   60

ACCTATACAA   70

(2) INFORMATION FOR SEQ ID NO: 2093:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 88 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2093:

GTTTTGGGTC TTGGGTATTA GTTTAATCTC CATCATGGTT AATTGGTATG GTATTGGTAT   60

TAGTAATCAT GTATGATGGG CTGGGCGG   88

(2) INFORMATION FOR SEQ ID NO: 2094:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 52 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2094:

TGGCCATTGA GGCGCATTAC GTACTACGGC TTGTCGTAGG GACAATTATT AT   52

(2) INFORMATION FOR SEQ ID NO: 2095:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 85 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2095:

AGTTGATGCA ATGAGTGATG CAAGGCGACT GAAAAGTTGG TATGAATGAC AAAACTTTAA   60

(2) INFORMATION FOR SEQ ID NO: 2096:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2096:

ACTTAAAATC TAATACGGTA TTTTCAAAAA CGAATAAAAG TTACCTCTTG TCT   53

(2) INFORMATION FOR SEQ ID NO: 2097:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2097:

AACTTAATAT TGCTACGATA TGAACGGCAT nAACATACTT AGCGnTGnTC   50

(2) INFORMATION FOR SEQ ID NO: 2098:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 72 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2098:

CAAAATAAGA AATTAATTAA GAAAATGCCA AGATGCCAGA TGCCATCGGC GGAAAGGAAA   60

TTGCACGTAC GG   72

(2) INFORMATION FOR SEQ ID NO: 2099:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 78 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2099:

CCACCCAAAC CCAAAAAATA AAGCCCAAAA AATTGCCAAG GAAGGAAAAG GAAAATTGTT   60

(2) INFORMATION FOR SEQ ID NO: 2100:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 208 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2100:

CACCAATTTC TTCTGGnGCT GGATCTCGAC CTAAGTCCTG TAATAATTGA CGTTGAACAC   60

GAATTAATTT ATTAATTGTT TCTACCATAT GCACAGGGAT ACGAATCGTA CGTGCTTGGT   120

CAGCAATTGC ACGAGTGATT GCTTGTCTAA TCCACCATGT TGCATATGTT GAAAACTTAA   180

ATCCTTTGTT AAAGTCAAAT TTTTCAAC   208

(2) INFORMATION FOR SEQ ID NO: 2101:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2101:

TAATGAAATT AAGTAAAATA AAAATTATTT CATGGATTGC TTCTATCTAT ATCGAAATAT   60

TAAGAGGAAC ACCAATGTTA GTTCAAGTAT TTATCGTATT CTTTGGTATA ACTGCTGCAT   120

TAGGACTAGA CATTTCAGCT CTTGTTTGTG GAACAATTGC ATTAGTTATT AATTCCTCAG   180

CTTACATTGC TGAAATTATT CGTGCAGGTA TAAATGCTGT TGATAAAGGC CAAATGGAAG   240

CCGCACGTAG TCTAGGTTTG AATTATAGAC AAACGATGAA AAGTGTAATT ATGCCACAAG   300

CAATTAAAAA TATTTTACCA GCTTTAGGTA ATGAATTTGT CACTTTAATT AAAGAATCAT   360

CTATTGTGTC AACAATTGGA GTTGGCGAAA TTATGTTTAA   400

(2) INFORMATION FOR SEQ ID NO: 2102:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2102:

(2) INFORMATION FOR SEQ ID NO: 2103:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2103:

```
TTTAAGGAGA AAGGTCATTG GTATAATCTT GAGAAAGAGT GGCAAGAGTT CTTAAACTCT    60

GGGAAAGAGG TGAAAAATAT TAAAATGGAA GTAAAATATA GCGGTAATAG TCAAAGACCG   120

ACTATATTTA AAGTTGAATA TGAAATTAAT GGTGAAAGAA ATATTAGAAG AATATTAAAT   180

AAGTAGAGGT GCCAACATGA CATTTGAAGA GAAGCTTAGC AAAATATACA ATGAAATTGC   240

GAATGAGATT AGCAGTATGA TACCGGTAGA GTGGGAAAAA GTATATACAA TGGCTTATAT   300

AGATGATGGA GGAGGTGAAG TATTCTnTAA TTATACTAAA CCAGGnAGTG ATGACTTGAA   360

TTATTACACC AATATACCTA AGGGTATAAC ATTCCGGTGC                         400
```

(2) INFORMATION FOR SEQ ID NO: 2104:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2104:

```
AACCATCATA AAATGTTATT AAACCGTCAT GGACCGCGTC ACCATTTAGT CCT           53
```

(2) INFORMATION FOR SEQ ID NO: 2105:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 116 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2105:.

```
AAGCACAAAT TAGCAGAGTG TTTTAATTTA AATGAACAAG TACCTTTACA ATTTTTGGAT    60

AATGTAAAAG TTGGTAAAAA TAATATTTAT GnTGCTTTGG AAGAGTTTGC CAACAA       116
```

(2) INFORMATION FOR SEQ ID NO: 2106:

        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2106:

AATTTGCAAA AGAATCATGG ACAATTGAAA GCAAAAGGA TCATCATTAA AATTGAACTG   60

C   61

(2) INFORMATION FOR SEQ ID NO: 2107:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 60 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2107:

GAACCAATGT TAAGCTAATT AATGGAATCC TAACAGCGTT AATCTATTTA AAAAACTTAA   60

(2) INFORMATION FOR SEQ ID NO: 2108:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 126 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2108:

ATTTGAnAAT GAATCTGTGG AACATTTTGC TAATCATGAG GATAAAATCA TATGATGTTG   60

AAAGCGAGAA TGGGATTACG TTAAACGTGG GCGCTGCTAA TTTAAGCACC TTATTTAGTG   120

GAAGAT   126

(2) INFORMATION FOR SEQ ID NO: 2109:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2109:

ATAATGTTAA AAAAACGGCA ACTAATCTTT TCATACTAAC AATGATTATA TGTACAATAA   60

2147

CGTTAATAAT GCTAGATAAT TTTAAAAAAA TGAAAAACCG TGAATATCAA AAAGAAATAG   180

CAGAAAAAAA TAGACATATT AATACATTAA TTGCTGAACA AGAGCGACAT AGAATTGGTC   240

AAGACTTACA TGATACGTTA GGGCATGTGT TTGCAAGTTT ATCATTAAAA TCAGAATTAG   300

CTTATAAACT AATAGATGCT GATGTAGAnA AAGTAAAAGC TGAATTATTA GCAATTAATA   360

AATTATCTCG TGAATCATTG nACAAAAGTC GAGAAATTAn   400

(2) INFORMATION FOR SEQ ID NO: 2110:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 61 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2110:

AAGATTTAAT ATCGGGGGTA ATGTTGATTT TCAAATATCG CGATGTGCTT GTACCACCAT   60

T   61

(2) INFORMATION FOR SEQ ID NO: 2111:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 55 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2111:

TATACTAAAT TATGGCAACT TGGCTCATAT AGGTCGAGTT ACCAGACATA TTCGG   55

(2) INFORMATION FOR SEQ ID NO: 2112:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 400 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2112:

CGAATAAGTT CTGGGCCTTT TGTTGTTCAT TAGCTTGTTT CTGTTTTGAT TGTTCTGCCA   60

TTTGAACTAC ACCAACCTTT TAAATTTATT CTAGTGACAG GATAACTAAA ATATATTTCT   120

TATGCAATAA TTTCCTATTG ATAAGCATTT TCAGATTTTA GTTGTAAATT TTGCCCTAAT   180

AATTTATAAA GAATAAATTC GTCTCCTCTT TGACCTATAA TATATTGAnC ATTATAAGCC   300

ATGCGATTCA TTCCAGACAC AGCCATAAAC TCTTGTTTAT CTATCATTTT AAATACCATT   360

TTTAATTTGG CTTAATGGGA CATTCCGTAT TAAATCATTT   400

(2) INFORMATION FOR SEQ ID NO: 2113:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 87 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2113:

TGTTTTCAAA GCATGGTATA AATGCTTTGT AACATAGGTT TTGCCTACAT CAGTATTCGT   60

ACTTGTAATA AAAATCCTCA TAAAAAT   87

(2) INFORMATION FOR SEQ ID NO: 2114:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2114:

TTTACAAGTT AAATATAnCA CTAAAAATTT TTAAGTCAAT AAGAATATAT   50

(2) INFORMATION FOR SEQ ID NO: 2115:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 52 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2115:

TGTGCATAAA ATCCTTTTAC TTTTTGTAAT TGATTGTTAT CTTTAACAAT TA   52

(2) INFORMATION FOR SEQ ID NO: 2116:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 113 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2116:

ATTTAnAACC CAATTCCCCA TTATTTTTTA AAACGGATTC CATGGGTGGA CCATTGGAAA   60

TTTTAAAAAA ACCATGGCCC CATTCCAAAA AGTTAGGATG GCCAAAAAGC CTT   113

(2) INFORMATION FOR SEQ ID NO: 2117:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 93 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2117:

GATTTATCAA CTATTTCCGT ATTTTGATTA TCTCCATACA ATTTCCAATC CTCTGGCTTA   60

TCAATAAATA ATGATAATGG CTTATCTTTC GAT   93

(2) INFORMATION FOR SEQ ID NO: 2118:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2118:

TGATTACCTT GAnACATGAC TTTnCCTGAn TGGTAAATAT TTACAGTTGT   50

(2) INFORMATION FOR SEQ ID NO: 2119:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 217 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2119:

AGATATAAAA TATAAAAAAT TATTAAAAGC TATATCCAAT CAAGACTTTA AAGGGTTAGT   60

TCCAAATATC AATCAGAATG ATAATTATnC TGAAATATAT ATAATTAACA ATACTAAAAA   120

CTTAATATAT CATTTATATG ATGATAGAGG TCTATGGCTA GCTTTTAATA ATAATGAAGA   180

TTATGCAAGA TATnCTGAAA AATATAATGA TTTAATA   217

(2) INFORMATION FOR SEQ ID NO: 2120:

```
            (A) LENGTH: 75 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
   5        (D) TOPOLOGY: linear



        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2120:

  10  AGACTTAGTA AAGTTAGATC ATCTAAAGAT GAGCGTAAAA TTTATATTTA TTTAAATAAT        60

      GGATGATATA TCTAA                                                        75

      (2) INFORMATION FOR SEQ ID NO: 2121:

  15
            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 87 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear
  20



        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2121:

  25  CACCACCTAC ATTTACTATA TAAAATGTAG GAATGGTAGA TTGATTTAGA TAAACTGGAC        60

      GTATCACTTT AAGTGCTTTT TCAAAGA                                           87

      (2) INFORMATION FOR SEQ ID NO: 2122:

  30
            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 70 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear
  35



        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2122:

  40  TGTTCTTTAG CTAAAGCTTT AGCTTCTTCA TCACTTTTAA CTTCATAAAA ATCTACACCA        60

      GTAGCTTCTT                                                              70

      (2) INFORMATION FOR SEQ ID NO: 2123:

  45
            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 50 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear
  50



        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2123:

  55  TAnATCTAAA AGGAGAAATG CTGAAGATGA GAGAGGTATT TTTGAAATGT                  50
```

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 63 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2124:

TTAAAGGGTA ATTGTTTTAA AAAAAGATTA AACCGAGGAC TTTTAATTGT TAAAACCATC   60

CCT   63

(2) INFORMATION FOR SEQ ID NO: 2125:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 78 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2125:

TGTAAACGAC TATTACATGA TCACAATCCA TTCAGCGCCA TTATATAAAG GTACTTAATA   60

TAGGACATCA TTCGCAGC   78

(2) INFORMATION FOR SEQ ID NO: 2126:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 50 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2126:

TTTGGTCGTG TGCAAGACAG AAGTCGACAT ACTCCAATGA AACATCATGT   50

(2) INFORMATION FOR SEQ ID NO: 2127:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 50 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2127:

TTTGTGTCGA TGCGCTTTTT CACTTCTTCT GAATGCTCGA AATCATTCGT   50

```
        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 50 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear


        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2128:

TGTCTGAAAT GATCATTAGG ATTGCTCCAG CTCAATGTCA GTnGnAATGA                  50

    (2)  INFORMATION FOR SEQ ID NO: 2129:

        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 65 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2129:

TCCAATTACC TACAAAGTGA GTGCTTTCTT GACCAAGTCA AAACGAACTT TTATATTTGT        60

CCAAC                                                                   65

    (2)  INFORMATION FOR SEQ ID NO: 2130:

        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 61 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2130:

TTCCAAGGTG TCGCTGACTT TCAACACACT GAATATATAC CTGCCAGTCG GCTGGTCATG        60

C                                                                       61

    (2)  INFORMATION FOR SEQ ID NO: 2131:

        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 92 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2131:

AGTTCTTCAG TCCAAATGCG GCATGTTGAC CCACCATAGG CGAGGGCATT TTCACCACGG        60
```

(2) INFORMATION FOR SEQ ID NO: 2132:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2132:

```
CCCCTCGAGT TTTTTTTTTT TTTTTTTTTA CTGGAGCAAA ATGAATTTTT TTTATTGTAC      60

TTCAGGGCAA CAAGTCAACA GCTGCAGGAA AACAAAACCA GGTCCAATCT ATGATCTAAG     120

AGGAAGTCAG GAAAGGCTTG GAAGAGAGAT CCAAAGGCCA TCCTGGCAAG GGGAATCCCA     180

CATGAGAATT CCTGGGAGAG AGCAGGCCCC AGGCAGCAAG GTCATCTTGC CTGCTTCTCT     240

GTAAGTTAAT CCTTCACAGG GAGCCAAGGC TTCTCTTGAC TGCTTGGACA AGAGGGTAAG     300

GGCCCTGGTT GCAGGATTTG CCAGTGAAGT CATCCATGTC AATAGACCAG ATCATGGCTC     360

CTCCCAGGTT AAATTCCTTA AGAACTGAAC CTTGnCTCCA                           400
```

(2) INFORMATION FOR SEQ ID NO: 2133:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2133:

```
TTCATCATAC AACATTACAC TTTGTATGAC TAAACCCAAA TTAACGATAT                 50
```

(2) INFORMATION FOR SEQ ID NO: 2134:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2134:

```
GTGGCAAGCT TTTTTAAGGT CTGACTGCCA TCGACGGATC TATGTTAACA GGTGGATCT       59
```

(2) INFORMATION FOR SEQ ID NO: 2135:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs

          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

5

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2135:

ATCAAAGTCA TCTnCATGGT CnATCACACC ACGCTTTATA TGGTAATTCT   50

10   (2) INFORMATION FOR SEQ ID NO: 2136:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 52 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
15   (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2136:
20
CGGGATCTGA GGTCGCTATC TGCAATCTGC AATCGCTATC TGCAATCTGG AG   52

      (2) INFORMATION FOR SEQ ID NO: 2137:

          (i) SEQUENCE CHARACTERISTICS:
25   (A) LENGTH: 50 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear

30

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2137:

nCTCAACCAC CCACACAACA ACACAACAAG CAGCACCCAC ACACCACACA   50

35   (2) INFORMATION FOR SEQ ID NO: 2138:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 87 base pairs
              (B) TYPE: nucleic acid
40   (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2138:
45
 TGTATTGTCA TTGTAGACGT GTGTAGCCAA ATCATAAGGG CATGTGATTT ACGCATCCAC   60

CTTCTCGGTT TGTACCGCAG TACTTAG   87

50   (2) INFORMATION FOR SEQ ID NO: 2139:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 77 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
55

2155

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2139:

TTCACCGTTG CGCAACGTTC AAGTTTGAAG TTCGTTTGGC ATGTTGAAAT AAGCACCAGT 60

TACACCAAAA CGCCCAG 77

(2) INFORMATION FOR SEQ ID NO: 2140:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 148 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2140:

ATCTTCTAAC ATTCACTTAG TAGCGTnATT TTTCGCTTAT AATGAAATGT TAAGCATATG 60

CGGGATTTAT ATTTTAAAGA GACCTTTAGA TACCATATAT ACCTAGGTTA TTGAAAATAT 120

GGATACCTTA TATAAGTGAT TTGCAATA 148

(2) INFORMATION FOR SEQ ID NO: 2141:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2141:

GCTGGCACAT AGATGATCGT CAAGTCGATC TCGCCAGTCT GAAGTCAAGA 50

(2) INFORMATION FOR SEQ ID NO: 2142:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2142:

TTGTTGTAAA TACTATCACT GTACATGGGT GCTATCAAAA TATTGTCAGT TCGTAAAATA 60

(2) INFORMATION FOR SEQ ID NO: 2143:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 135 base pairs

      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2143:

GTAGTATATC TTATTAATTG TATCATGAAG CAATTTAAAT ATCATGACAA TTTAGTTTGA   60

AAAACACACT TTGTGTTGAC GTTGTGTTTT ATGGGATATA GnATAGTAAG GAATGTAAAA   120

TGAAGGAGTG AATGC   135

(2) INFORMATION FOR SEQ ID NO: 2144:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 57 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2144:

TTTTAAGGTT TGAAGAAAAA AAGTTTTAAA AATTCAAGGA AACATTAAAT TAATTTA   57

(2) INFORMATION FOR SEQ ID NO: 2145:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 148 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2145:

TTTCGAAAGT TTGATAGTCC ACCTTACATT CTCCTACTAT TTTCTGATGT CCCAATACTT   60

TATATTATTT AAAGTAATAT AAAAGCAATC TCTTTTGAAG ACATGTTAAC CTAAATATTT   120

TTATATATAA TATATATATA AAATATAn   148

(2) INFORMATION FOR SEQ ID NO: 2146:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 50 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2146:

GTTAATACAA TACGGTTAAC AGCACCTTTA CGnTAGTTGC TTTnCTGCAn   50

2157

```
    (i)  SEQUENCE CHARACTERISTICS:
         (A)  LENGTH: 68 base pairs
         (B)  TYPE: nucleic acid
         (C)  STRANDEDNESS: double
         (D)  TOPOLOGY: linear



    (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2147:

AATCCCCTCT TTTCTCTATT TCCTAAATCA TAGAACTTTT AACAGTAAAA TTCAATCATT          60

AATACATG                                                                   68

(2)  INFORMATION FOR SEQ ID NO: 2148:

    (i)  SEQUENCE CHARACTERISTICS:
         (A)  LENGTH: 92 base pairs
         (B)  TYPE: nucleic acid
         (C)  STRANDEDNESS: double
         (D)  TOPOLOGY: linear



    (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2148:

AGGTCCATTT GTAATTTATA ATGTTGACTA ATAACATCTA CAGAATTTAA CGTTCCCATA          60

CCTCGCCACT GATTGTAAAT AAACAAACCA TA                                        92

(2)  INFORMATION FOR SEQ ID NO: 2149:

    (i)  SEQUENCE CHARACTERISTICS:
         (A)  LENGTH: 69 base pairs
         (B)  TYPE: nucleic acid
         (C)  STRANDEDNESS: double
         (D)  TOPOLOGY: linear



    (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2149:

ACCATCCATT AAATCAGGAT CTTCACTAAT AAGTGCTAAA TTAGCAGCGC CACGTTTAAC          60

GTAATCCAT                                                                  69

(2)  INFORMATION FOR SEQ ID NO: 2150:

    (i)  SEQUENCE CHARACTERISTICS:
         (A)  LENGTH: 384 base pairs
         (B)  TYPE: nucleic acid
         (C)  STRANDEDNESS: double
         (D)  TOPOLOGY: linear



    (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2150:
```

TCAAAATATA TACGATCACC TTTCTGTAAA ATCACACTAT TTTTATTTGC CGCTTCTGGA   120

TGTTGTTTAA AAAATTGTTG GCCAACTTCA CCTTTTAACG TGGCAAATTG ATAATTTCTT   180

GGTAGGTCAT GTTGAATTAA CCAAATGACA TAGTTATAAC AATATATACA GTTTCCATCA   240

TAATATACGA TTGGCATAAT TTATTCGCTC CTTTAATAGT ACTTATAGTC ATTTTTCCTA   300

ATTTAAAAAC ATTTAAACAA GGTTGTCACT TGATAAGTCC TCGCGACACG AAAATTGCCAT   360

AAAATTTATT TTTCAGnTTn ATAT   384

(2) INFORMATION FOR SEQ ID NO: 2151:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 83 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2151:

TGTTGTTTAT CACTATATTT TAAAAATAGT CTATAAGGCT TATCAGATGA AGTAGCTGCT   60

GGCGTAACAC CACCAGTAAA TGT   83

(2) INFORMATION FOR SEQ ID NO: 2152:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 73 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2152:

GTATTCGTAC ATTTTTCAGC AATTAACCAA GATGGTTACA AATCATTAGA AGAAGGTCAA   60

GCTGTTGAGT TTA   73

(2) INFORMATION FOR SEQ ID NO: 2153:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2153:

CCCCCCTCCC CCCTCCCCnC CCCCCCCCCC CCCCCCCCCC GCCCCCCCCC   50

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 55 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2154:

TATTTTAGGC TTAGCATTGA TGATGTTGCT CATTTTCAAT AATATAGGAA TTATT   55

    (2) INFORMATION FOR SEQ ID NO: 2155:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 68 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2155:

ATGCTTGCTG ATATAATGTA ATAGCGTCGT GATAACGTTG CTGGCTTATA ATATACATTT   60

GCGAGATT   68

    (2) INFORMATION FOR SEQ ID NO: 2156:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 68 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2156:

TAATCTTTGT CGTCGAAATA CAAACTAACT TTTGAGTTTA ATGATGAAGG TACGCATTGT   60

GTATCACT   68

    (2) INFORMATION FOR SEQ ID NO: 2157:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2157:

TCATTCATTT TCCTCTTTTC TTTTATTTAA AATGTTCATG GTTGTTTCTC TTAATTCTGT   60

AGATGCTAAA TGGTCAAATT GAATAATTGT TTCTAGACTC ATTTCATAAA TTTCGAAAAA   180

TAATTCTTCG GGATTACGTT TTTGTATTTC TCCAAATGTT TCATAAAGCA -AATCAATTTT   240

ATCAGCAACT GAAAGTATTT GGCCTTCTAA TGAATCATCT TTACCTTCTT GCAGTCGTTG   300

CTTATAAACA TCTCTATATT GTAATGGAAT TTCTTCTTCA ATAAAGGTCT CTACCATTTC   360

TTCTTCAACT TGCGAAAATA ATTTTTnnTAA TTCACTACTC   400

(2) INFORMATION FOR SEQ ID NO: 2158:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 232 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2158:

TATTTTTTTC TTCTAGGCAG TGTTAATACT GCTTCAATTT GTTTTTTACT AAATTGATAT   60

TTCTCTATGA TTGAATTAAT CAATTGATTG TCCATTTACT TAACCCACAC TTTTTCTTAA   120

ATTTACTCAT TTATTTTAAC ATATTCTAAA ATACTTCTAT TAAGATATGA TACTTAATGT   180

AATTTTCACT TCCAAAACAT TTAAAACGAA TGATTAGGnC ATACTATATT nT   232

(2) INFORMATION FOR SEQ ID NO: 2159:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 60 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2159:

CCGTTTTTCC AAAAACTTGA TCATAAACCC GCTCCTTTTT TCATCATAAC AAAATAAGAA   60

(2) INFORMATION FOR SEQ ID NO: 2160:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 60 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2160:

CGATTTACTG CACGACACAT TGCCACATCC TGGATGGGCA ATCTTTTCTC TTACCCGTCT   60

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 400 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2161:

ATTAGTTGAA GTTTTTGAGC AATTGAAAGA TATTCAGGGT CAAATAAAAA CGACAAAAAA   60

AGAATATCAA CAGACCAACA AAGAACTTTC TGCTGTAGAT AAAGAAATTA GAAATATAGA   120

AAAAGACCTC AnTGATACAA AAAAAGCACA AAATGAATAC GAAGAGAAAT TGTATCAAGC   180

ATATCGATAT ACCGAAAAAA TGAAACACG TATTGATAGT TTGGCAACGC AAGAGGAAGA   240

ATATACTTAT TTTTTCAATG GCGTCAAACA TATTTTGAAA GCTAAAAATA AAGAATTAAA   300

GGGTATTTAT GGTGCAGTTG CGGAAATTAT TGATGTGCCA TCTAAATTAA CTCAGGCAAT   360

TGAAACAGCA TTAGGTGCTT CATTACnACA TGTCATTGnA   400

(2) INFORMATION FOR SEQ ID NO: 2162:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 66 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2162:

GTGCGTACCA TTGTAATCTT CGTAAACTGG GTAATTATTT TGTCTTTCTT CATCATAAAG   60

TAATAA   66

(2) INFORMATION FOR SEQ ID NO: 2163:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 72 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2163:

AGAATGGTAA CATGGTAATA ATAAAATATA AACAGAATAC TAGTTAATAC ACTTTATACT   60

AGAAAAAGAT AT   72

(2) INFORMATION FOR SEQ ID NO: 2164:

(A) LENGTH: 325 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2164:

```
CGATAATCTG TTTTTTTAAA TCTGTTGCTG TTAGATTTAG CACCGATTCG TTTAACTTCA    60

AATAATTTTT ATTACCTTTG GAAGAAAGTG GAACTATTGT AACTGTTTCT TTTCCTTTAT   120

TGTCTTTGTT ATCTAATATT ACACAAAAAT GATTACCAGA AAACTCACTT CCAATATTAC   180

TCCCTAGTTT TACATATACC ACTGTTCCTC TACnATATGA TTTATAATAT CTTTnTTTAT   240

TGCTTGTAAC ATCGCTATGT ATAGCAATTG GAATAAAACT CTAGCCAATG AGGCATGTnT   300

ATAACTTTCA TGTTTTTACT GTCGG                                         325
```

(2) INFORMATION FOR SEQ ID NO: 2165:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 121 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2165:

```
TAAACCCCTT TTGGGTAAAA AAGTTTGGGA AAATTTCCCC GGGGGGAAAG GCCCCCAAAA    60

AATTGTGCCC CTCCnCGGGG GAAAATTAAA ATTTCCCCCC TTTTAAAAGG GTTTCCCCTT   120

T                                                                  121
```

(2) INFORMATION FOR SEQ ID NO: 2166:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2166:

```
CGGACAGTTA AATGAACTGT TCAATGAGCC CAGGATGTTG TAAATGGTTC GG             52
```

(2) INFORMATION FOR SEQ ID NO: 2167:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

2163

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2167:

ATTACAGTAA AAAATGGATT AACATTACAA GCGTGTCTTG CTAGAGCAGC CAA   53

(2) INFORMATION FOR SEQ ID NO: 2168:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 114 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2168:

AAAGATTATT TATTTGCAGT CATTAATTGT GATTTAATAC GGTCAGCTTT GTTTGAATGT   60

ATTAAATTAC nTTGAGCAGC TTTGTCTACT AACTTAACTG CTAAGCTTAC TAAT   114

(2) INFORMATION FOR SEQ ID NO: 2169:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 215 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2169:

AAGGAACCCC CCCCCCTTAA AATTTTTGGT GGTTTTAAAA AATTCCTTTG GATTTATTAC   60

CTTTATTCCT ATnATTTTCC GTTTGGATTT TCCTGGATTA AATTTCCCCA TTAAGCCATT   120

TCCGCTTCCC TTATTTTATn ATTTTCCAAA ATTTCCAAAG GTTCCATTTG GGATTTTGGC   180

AATCCTTTTT TATTAAAATG GCCTAAAAAT TTTTT   215

(2) INFORMATION FOR SEQ ID NO: 2170:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 114 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2170:

TATCGTTTTT AGAAATGGAT GTTCTCTCCA AAGATGATGG TATCTAACAT TATCTTATTG   60

GTATCATTAT GCAACCnTTA CAAAACATTT ACGCAAGATG ATACATTATC CAAC   114

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 76 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2171:

ATCACAGATG AGATAACAGA TCCACTGTAA CTTTACAATA AATAAATGGT ATCATAATTA   60

ACACGTAAAT GGTTTC   76

(2) INFORMATION FOR SEQ ID NO: 2172:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2172:

ATTATCACAA AATGTTGACA CGCAAAAAGT TGGTCAGTTA TCAATATGGT ATATAAATCT   60

GAGA   64

(2) INFORMATION FOR SEQ ID NO: 2173:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2173:

AAAGGCCAAC CAACCAAAGG CCAAAATTAA CCGGCCAATT CCAAGGGGTT AATTAAACCC   60

G   61

(2) INFORMATION FOR SEQ ID NO: 2174:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2174:

```
CACCCCGCAC TCTCCCATCT TTTACCTACT GGCTTCTTTG CATTGCCCTG GCACCTCCGT        120

CCTCAGCCTC CCAGGCTGTA TTCATTCATT CCCTTACTGA GCACGCACCA TACACCAAGC        180

ACCATTCAAG GTGAACCAGT CAAATGAAGG CCTGGCTCAT TTTAATGGGG GACAATGAGC        240

ATTTTTGTTA CAATTTCATG GAGTGATGAG TGCTGTGAAG AACTAAACAG GTCAGGTGTA        300

AGTGGCTCAT GCCTGTAATC TCAGCACTTT GGGAnGCCGA AGCAAGTGGA TCATTTAAGC        360

CCAAGAGTCA AGACCAGCCT GGGGnnACAT AGTGAGAnTC                               400
```

(2) INFORMATION FOR SEQ ID NO: 2175:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2175:

```
ATATCGTTTA AACCATCAAC AAGATTTTAT AGATGCAACT TTTACTGCGC TGAAATCAGA        60

TAGAGCACGT TTAAAAGAAG TGCCAGTTCA TGTTGAACTT ATAAGTTATA TTTCTAAATC        120

AAAATAAACT GCTATCTAAA ACGCAAAGTT GATCAAAATA TCGATTTTGT GTTTTTTATT        180

GAGAAATTAT ATAGGAGTGT CAATCGATGA TTTATTGTGA ACAGAGCGTT TAATATTAAG        240

AGACTGGCAT GAAGATGATC TGTTACCTTT TCAAAAAATG AATGCGAATT ATGACGTACG        300

TAAATATTTT CCAAGTTTAT TGAGTTAnCG nCGTTCAGAA TTAGATATGA GACCTATGGA        360

TGCGGTTATn AAAGATTATG GCCATTGGGA TTATTGCCnG                               400
```

(2) INFORMATION FOR SEQ ID NO: 2176:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2176:

```
TAAATCAAGG AAAGACATTT TAAGGTACGA AGGTTGATAA CAAAAAACCA ACAGATTTAG        60

GGGTATCAGA G                                                             71
```

(2) INFORMATION FOR SEQ ID NO: 2177:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2177:

GTTGAATTAG GCAGCACGAT TATTGATGCT GAACTGTTAG AGTCAGATAA G   51

10 (2) INFORMATION FOR SEQ ID NO: 2178:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 61 base pairs
   (B) TYPE: nucleic acid
15   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

20
  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2178:

TTAATTAATG GTATTTACAT ATTCATAACC AAAGGATAAA ATAATTGTGA AATTATTCAC 60

A   61

25 (2) INFORMATION FOR SEQ ID NO: 2179:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 50 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
30   (D) TOPOLOGY: linear

35
  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2179:

CATTTTACCA TGCAGCAAAT AATACAGGTG GTGCCGTTAA CAAACGTGAn   50

(2) INFORMATION FOR SEQ ID NO: 2180:

40 (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 73 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

45

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2180:

GCCGAACGAA TCAAATACCA TACCTAATTG ACTGCAGGCA TGTCCATATA GTGCAGTTAA 60
50
CTGTCTACAA GGC   73

(2) INFORMATION FOR SEQ ID NO: 2181:

55 (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 301 base pairs

        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2181:

TACTTTTGGC GATATTCGGT ATCGTTATTA CAGTTATTTT ATATGCAATT AAAATTGCCGG   60

GTTCTATCTT TATCGGTATG ATCATCACAG CAATCGTTGG TATGTTCACT GGATTGATTC   120

AAATGCCATC TGGTATTGTG GGTAAGATTC CAAGTATTGA ACCAACGTTC GGTGCTGCAT   180

TTGAAGCGTT TAAAGACCCA AGTCAATTAT TAACGATACA GTTCTTAATT GTTATTTTAA   240

CGTTCTTATT TATTGATTTC TTTGATACAG CTGGAACATT AGAAGCGGTT GCAnCnCAnG   300

C   301

        (2) INFORMATION FOR SEQ ID NO: 2182:

                (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 54 base pairs
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2182:

TTGATTCGCC TTGGCCAGAA TTACTTTTGT TTTGGGCGTC ATTGCAAGTT TCTA   54

        (2) INFORMATION FOR SEQ ID NO: 2183:

                (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 118 base pairs
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2183:

TTAGTnACAT TGGGACATTT AACTGATCCA CCAGTACTTT TGGCGATATT CGGTATCGTT   60

ATTACGTTAT TATTGCATAA TGCGGTCACT ACGAGACACC GCACTGAGTC CGATATCA   118

        (2) INFORMATION FOR SEQ ID NO: 2184:

                (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 303 base pairs
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: double
                    (D) TOPOLOGY: linear

AGATAGTTAT ATAAAGATTT CATCTTCTGT ATTACATTGA TATTTTTAGG TCCCTGTATA   60

TAAAAATCAT ATGCCTCATC AACAACATCA CTTTTATTTT TGATTGCAAT TTGATGTAAT   120

ATCTTTTGAC TAAAAACACG ATTAATCATA TTTCTATTAT CCATAGCTAC GCACCTCCTT   180

CAACATACAT TTAATGCTTA TCCTGTTAAT ATTATAAnCn ATTTTAAATG CCTATAGACA   240

TTATTTCTAT ACACATACGA TTATnAAATT GTATTGAAAC CAAATGATGG TTGCCAAACA   300

CAT   303

(2) INFORMATION FOR SEQ ID NO: 2185:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 110 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2185:

CCGGGGTTTT GGTTAAACCC TCCCAAnATT TTTTTTAAGC CCAAACCTTG GAAAAACCCA   60

GGCCACCCGT TGGAATTTTT AAGCCTTGGA TTAATCCGGT TTGGTTAACC   110

(2) INFORMATION FOR SEQ ID NO: 2186:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 86 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2186:

CCTATATTGT CACCCAACTT CATTACGGCA CCTTTACCGA AAGATTCTC CATATTTTTA   60

ATTACTGTAT CTAAAGCTTT TTGACG   86

(2) INFORMATION FOR SEQ ID NO: 2187:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2187:

TTTGCTAGAA AACATACCAC ATTTGCCAAT TATATTATTT ATTCTGATGT TTATTTTCGG   60

TATTTAGAGG TGATAAAATT TGTCAACTAT TACAAAGACT AAAATAAAAA TCTTTATTAA   180

TTATTTTATT GGTATATTAG CCTTGGCGTT TGCTGCTTAT ATATTATTTA AATAAAGGTT   240

AGAGTGAAAC GTGTTTATGA ACTAGACGTT CTAGTATAGT TACTACAGCT TTAGTCAGAA   300

GGTATCATTG ATAAGATCAT ATTAAATCAA AGAGGCATTG ATATACACTA AAAAGAGGCA   360

AGATTACCTG CCTCTTTTTA GTnATTAAAT ATACGTGTTA   400

(2) INFORMATION FOR SEQ ID NO: 2188:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 131 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2188:

TTTTATAAAA TATCAGACAT TTTTGnTCAA CATACATCTC TTTCGATGTT TCTAATACTT   60

TATCATTAAC CATTACACCT TAAAGTTATG ATGTGGCATG TTTTCTTATA TTCATAACAT   120

CAATTTTATC A   131

(2) INFORMATION FOR SEQ ID NO: 2189:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 85 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2189:

CGTAAAATAT TTTGATTTAA AATGGAGGGT ATTAATATGA AAAGGTTCAT GTAAAATCTA   60

GGGGTATTCC AATATTATAA GGCAC   85

(2) INFORMATION FOR SEQ ID NO: 2190:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 224 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2190:

CCCGAGGAAT ACATGGCATT AAATACACGT TTAATATTTA TAAAGGTGAC TTAATTTTGT   60

2170

ATAATTGTTT ATCAGTGATA AAATATTTGC AATAAGAAGA GAATGACTAA ATAATCTTAA   180

TTTTCAGAnA AGTAATTGTA ACCTTACTGG TCTTATGGTA ATAn   .   224

(2) INFORMATION FOR SEQ ID NO: 2191:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2191:

AGCTTTTGTA GTTTTCTTAA GCACACCGGC GATTTGATTA TTACATAAAG GATTCCCTTT   60

TTTTGTTGTG AATATGAACC CTCTGTCAAC ATAGCTCGAA TTCCATCTTT TCAACATTTT   120

GTTTTCCAGT ATTATCTTTT TAAAAATTTC TACGGTTCTA GAATTGATGC TGATACTTCT   180

TTTTGAACTT ATAGTCTTTG TAGTGTCTTT GTATCCGAAT CCTTTCTCGT ATTTAATGCG   240

GTGAATTGTA CCTGTTATAT TGATAGTnTT GTTTAATAAA TCTATATCTT TTTCCTGCAG   300

TGCTTGTAGT TCTCCTATGC GCATACCAGT TAAAGCCTGT ACTTCTAAGA TGCTGGCAAT   360

TAAAATGCGA TTTCGCTTTT GTAACTTATT ATCATTTAGT   400

(2) INFORMATION FOR SEQ ID NO: 2192:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2192:

GACGACTGAG AGGCCGTTGA ATTTGACGTT GCCATATnTT CAAATTTAAC   50

(2) INFORMATION FOR SEQ ID NO: 2193:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2193:

GTTGTTTTCA TATCAAAACA CCGTAGAATA AACAATGAAT GGAATTACTT TTGCAATGAT   60

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 56 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2194:

CCAGTCACTG ACTACGTCTT CCTCGGTGCT GGCGGTGGAG CCATTCCCTT ATTACC   56

(2) INFORMATION FOR SEQ ID NO: 2195:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 69 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2195:

GTAGGGAAAG GAAAAACTGC TTCCATTGGG AAATGTTAAA CCTTGTTCCT TGGTGATGCC   60

ATTGGATTT   69

(2) INFORMATION FOR SEQ ID NO: 2196:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2196:

ATATGACACT ATATTTTATA AACATACATT TAATGATTCA TTATACAATT GCCAA   55

(2) INFORMATION FOR SEQ ID NO: 2197:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2197:

GCCCTAGTTC AATCATATAA CCATCTTTAC GATACGATTG AATCTTTCCC CCCGGACGAT   60

TCGATGCTTC A   71

```
    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2198:

AGTAGCACAA CAGCCATGCG GAGACAGAGA ATCGTTAGAG ATTAATGGAG ATCA          54

(2) INFORMATION FOR SEQ ID NO: 2199:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear



    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2199:

GGCGGTTTTA TATTTATCGT TGCAGTTATG CAAATTGTAC TTGGTAGAAG TATAGATTCT     60

CGTGATTCGA AAAAAGTACT TTTAACGGGA TTGGGAATAG TAATCATATC TAGCTTTATT    120

TGTGCAGTGA CACATAACTT TATATTATTT GCTATATCAA GGTTATTTCA AGCAATTGGT    180

TGCGGAATTA TTCCTCTCGT GACTTTAACT TTATTAGCCA AACTAAGTAC AGATAATGGT    240

AGAGCTCAAG CTATGGCGAA CTATCAAATA TTTTTATCAT GTGCACCAGC TTTGGCACCA    300

ATCTTAGGGA GTACTTTAGG TGGCAAGATG GGATATATT GGTATTTTAG TTTTTTGGCT    360

CGTTATATCT ATCGGTATTA TTTTTGGATA nCTnTnTTAA                         400

(2) INFORMATION FOR SEQ ID NO: 2200:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear  ,


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2200:

GGATATGCGA TGGATGACGC ATTGCTATAT CGGCAATTGn GAAGCTGCTG               50

(2) INFORMATION FOR SEQ ID NO: 2201:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2201:

ATCGAATATC ACTACTATCT CTnTTnAAGT ATCTACAATC TCTCCAATCT 50

(2) INFORMATION FOR SEQ ID NO: 2202:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2202:

TCGACAATCC TAATGCAATT GCTTCATGTG GnTGTGGTAG TTCATATTAG AACTGCAAAA 60

GTTGCAGGTG ATCCTGAAAA TTGCTAATAA AATAACTTTT TAATGGTTAA CCCAATTTTT 120

GGGATACAAA TTGATATCAA TAACGATTAA GGACATATTT GATTATGTCC TATTTTTGCG 180

TAAAGATATT TTGTTTTATT AAAAAGCTTA TTGAAAATTA AGAATCTGAC TATAAATAGT 240

ATTTTAAATG ATCGTGATAG CGGATACATT TTTAATCGAA ATCAGGCTAC GAAAAAATTA 300

ATTAATTTTT TCACAATCTG ACTGAATCTT GCTTGAAAAT ATAACATAAA AGCTATAGAA 360

TTAGTATTGG ATTAAAAATG TCTTTTTTGT GAACATCACA 400

(2) INFORMATION FOR SEQ ID NO: 2203:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2203:

GCGTTGTCCT TTTCGTGACA TGAAACAATG TGGAAAACAT AATTAAATnn AGGGAAAGTG 60

TGAATAGTTA AAAAATTAGT ATTGTGTTAT AAAAAATAAT TAATACTGTT AGGATTTCAT 120

TAACTAACTT AACGTTGGTT CAAAAATAGT TAAAAGAGG TTAATTCATA GCGCAGTATC 180

TCACTTATAT AATGATAGTA GATTGTTCGT ATTACGTAAT TGAATTAATC ATATAAAAAT 240

ATATTAAGAC AAATTTATAA ATAGATTGGG AGAnTAGTAC TGTGAAATTA AAAACGTTAG 300

CTAAAGCAAC ATTGGCATTA GGCTTATTAA CTACTGGTGT GATTACATCA GAAGGCCAAG 360

CAGTTCAAGC AAAAGAAAAG CAAGAGGGnG TACCACCATT 400

```
        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 136 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
5            (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2204:

10   GTTATTTTGT ATGGTTAGTC TTTAAAATAn ATATAGATAT TAAATATTTA TTTTACGAAT      60

     TGTTAAGTAA AGAAAAAATA TTAATCAATC CGGGTTACAT TTATGGCAGT AAAGAAAAGA     120

     GTATAAGGCT ATCTTT                                                     136
15
     (2)  INFORMATION FOR SEQ ID NO: 2205:

        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 400 base pairs
             (B)  TYPE: nucleic acid
20           (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



25      (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2205:

     TTTTATTTTT TCGCAATGAA AAACAATCTT TCTGCATCTT CATTATGTTC ATCTATATTA      60

     AAATCAGTAA ATGTTTCAAC ATGTTTAAAA CCAACTTGAG CTAACCAAGA CAAATATGTC     120

30   TTTTCATCAA ATGTTCTCTG AAAATGAGAC TCATCAAATC TTGAATATGT TTCATCTTCA     180

     TGTCGAATGA AAAATGTCAT ATCATGATAA ACACTTAAAG GTAAATCTCC TTGCACAGCA     240

     TCCCATGCTA AAAAAATGTC CCCTTTATCA TCAATATAAC TTTGATTATT AAACAAAGTC     300
35
     ATCATTTTAT AAACAGTATG TACATCAGAA ATAAATACAC CTGAATCAGT CAGATGATGA     360

     TAAACATTGA TGAATGTTTC AATCACTGCA GTTTCATCTT                           400

     (2)  INFORMATION FOR SEQ ID NO: 2206:
40
        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 379 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
45           (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2206:

50   TTGAATATCA TATAAAAACA TCAGGTTCAA AGTTGACTAC TCTTAATAAT ATAAAAATAA      60

     GAATTAAAAA CATTAAACGA TACTGCTCTG AGAACTTGCT TTTAAACAAA CTTGATACAA     120
55
```

GTCAACTCGG AGATATGAAA GGAGCnATTA AATATGCAGT TAAATTTTAC AATTATCCAA   240

ATGAATATTT GTTAACTAAT GTCAAAATTC CTAAAAGAAG AnAAACAATA GAGGATATCG   300

AAAAAGATGA ATCTAAAATG GTACCACTAT TTAGAAATGG AACCAAGTCC TACnGATACG   360

TGATCATATA CTAATGGAT   379

(2) INFORMATION FOR SEQ ID NO: 2207:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 137 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2207:

CATCTTGGGA CGTTTTAAAA AGTAACGTAG CGAAGACTAT TGGAACAACA ATGAGAACCA   60

ATGCTAGAAG GATCAAAAAG TATTTTAAAA ATTTATTCAT GATTGATGCT CCTATATTAA   120

ATTTnTGTTA AATCATA   137

(2) INFORMATION FOR SEQ ID NO: 2208:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 72 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2208:

GCGCCGCTCT GTTCATTTTA CCTAAATCCA ACGTTTCAGG AATAGATGTT TTCAAACCAC   60

TTTGAAATGG AT   72

(2) INFORMATION FOR SEQ ID NO: 2209:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2209:

ATGTAGCAAC TAAAGATGAT AGTGGATAGC GACACGGTCA ATAAACTGCC TA   52

(2) INFORMATION FOR SEQ ID NO: 2210:

           (A) LENGTH: 206 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2210:

TTTTTTATGT TCTTTTTTAA TAAGAGGGAA GTGAAGTTGT ATAAAAATGT ATTAAATATG   60

CACTTTTTAT ACATTAACGA TTCATATATG TCTATTATGT ACCAAATTTA TAATTTGTAT   120

AATTTTCGAA CTGGTTAAAT TCGAAAAATA TCACTAATAT ATnTAGATCG ATGTGTAACA   180

TTACGTTCTA nTAATTTAAT GTTGCA   206

     (2) INFORMATION FOR SEQ ID NO: 2211:

         (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 60 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2211:

ACGATGTATT TTGATATCGT TACCAAAGTC TTTTAATAAC TCATTTTCAT CTAAATAAAT   60

     (2) INFORMATION FOR SEQ ID NO: 2212:

         (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 331 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2212:

TGATAAGGTT TGTCCCATCG CTATTTGAAA TGATGCATTG TAAAAAACTA TCATTTGTTG   60

GTAATATCTT AGTTCGATGA CTTTCTTTCC AATCTTTCCG TGTCATAGAG ACAAGATTTT   120

TTGTAGCTAT CTTAGTTGCT TCTTGAATGT TCATTTGTTA TTCCTCCTTT TAAGATGTTT   180

GTnTTTCTTT AAATGCTAAA ATAATTGATT TCTTTTTATC ATTCGTGAAT ACGAAATTTT   240

CGTATTCATT ACCTAAAAAA ATATCATCAT ATTTAACATT AAAAGCACTC ATATACTTAG   300

AAAGTAAACT AACnTTAATG GnTGTAGAGT C   331

     (2) INFORMATION FOR SEQ ID NO: 2213:

         (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 61 base pairs

```
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2213:

AGCATAAACC AAAAGATGCG GATATACTTG AACGCGTCAA AGATATACTT AATAAAAAAG   60

A   61

    (2) INFORMATION FOR SEQ ID NO: 2214:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 56 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2214:

TCTATTTGAG TTTACATTTG ATTAAATGAA TGACAATTAT ATGAACCTGA CTTGGT   56

    (2) INFORMATION FOR SEQ ID NO: 2215:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2215:

ATACCACTAC TATACAGTTA AATTAATATA CGTTAAAACT TTAATCCGAT ACATTGGTTA   60

AAATGATGTT CCTCGCTGGT GGATCGAGAC ATACTTCGCT CTGACTTCTT TAGTCAGTTT   120

TTTTTCAGCT TTTTAGGTGT AATCACTGAC TTTGTTACAT CACGTCAAAT TTACAGTCGC   180

TATTATCTTA ACTTATCnAC GCTTATCACA CATCAATTCA GATATTATAT TGCATTGGCG   240

nCTATCACTT TGAACCTGCT GTGACTGGAA CTACTGGCTG TCAnGAGCGA GGGCTGATAA   300

TGAGCATAAA GCAACATATA AGTAATACGG CCGAATATGT AAATTCGGCA GCTTTAGGCA   360

ATGCTGCCCG GGCATGACTA GnACATTCAC AAGAAGCTCA   400

    (2) INFORMATION FOR SEQ ID NO: 2216:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 133 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2216:

TTTTTAAAAA AGGGGTTAAC CAAAGTTTTG GAACCCCAAA AAATTCCGGA GTTAAAAAAA   60

CCCCAAAAAA TTAAATTAAC CGGTTATTCC GTTCCAGGAG CCAAATTTTT ATGGTTCCAA   120

TTnCCAAAGT GGG   133

(2) INFORMATION FOR SEQ ID NO: 2217:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2217:

TACTCGTACC ATTAACCAGT CTGATTAACC ACAATACTAA GGTATTCAAT ACATCACTGA   60

CATC   64

(2) INFORMATION FOR SEQ ID NO: 2218:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 82 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2218:

TATTCTATAG AATATGGATA ACGTTTAACA TGATGTAGAG TATTCATCAT TGTAACACGT   60

CAATTTGATA TGTGAGATTA AC   82

(2) INFORMATION FOR SEQ ID NO: 2219:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 70 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2219:

TTTGACGCAA TGATTTAGCT GTAAATATGC AATCTAAAGG AAAGTACCAC TTATGAGATG   60

TATTAAAACG   70

(2) INFORMATION FOR SEQ ID NO: 2220:

          (A) LENGTH: 66 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2220:

AAAAATTACC CCAAAGAATT GAAAATTTGT TGTTTGGGTT ACCGGGTTTA AGATTAATCC   60

GGTTGA   66

(2) INFORMATION FOR SEQ ID NO: 2221:

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 54 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2221:

GATCGCAACC AAAATAATGG TCTTCCTGGA TTATTACTTT ACCAGCTGGC ATAC   54

(2) INFORMATION FOR SEQ ID NO: 2222:

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 50 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2222:

GTGTTGCTAC AGCTAnCATT TCATATTTAA CGnGTTGTGG TATTTCTAAA   50

(2) INFORMATION FOR SEQ ID NO: 2223:

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 50 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2223:

AATGGGGGnA CCCAGCnTGA GTTATGTCAT CATATCGGTA TGTGATACAT   50

(2) INFORMATION FOR SEQ ID NO: 2224:

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 54 base pairs

        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2224:

GTAGATGCGC CCTCATATGG ACAAAGATAA AGTATCAGCA GATTGGACGC TTTA   54

(2) INFORMATION FOR SEQ ID NO: 2225:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 63 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2225:

CGAGACTTCA CTTTGACTAA ACGCGTTAAG AATTTAGATT ATGCTTACGA TGAAGAAGAA   60

TTA   63

(2) INFORMATION FOR SEQ ID NO: 2226:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 55 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2226:

TGGCCATTTT TAATGGGGGG AAACCTTAAA AAGGGGTTTT TAATTTTAAA CCAAG   55

(2) INFORMATION FOR SEQ ID NO: 2227:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 131 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2227:

TCCATTTGGT TGCCTTCTTT AAATAAACCT TGGATTATGC CTTTCCTCCG GTTAATTAAT   60

GGGACCAGGG GCCAAAAATA CCCCCTTTTA AATATAnATT CCCAAAATCC ATAGTTAAAT   120

AATCCATTTG C   131

(2) INFORMATION FOR SEQ ID NO: 2228:

```
          (A) LENGTH: 350 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear
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          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2228:

```
CCATCTGTGC TTCGTTAGGC GCTTTCGGCA TCACGGTGAT GGTTTGCGAC AGATCCGCCA          60

TCCGGCTGAA TGGGAAGCCC GCGTTAnAAA GGCGCGTAGA TCCGGCATCG GGATGAAGTG         120

GTAATACTTC GAGAAGTCGA TGGTGGAGTC GTCACCAATC ACCACATGAT TCTGCACCGG         180

CTGGAAGGTA ATACAGTTAT CCACCGAACC GCCCGGCATC GGGTTCATAT ACTCAAAGTC         240

GAAGCGCACT GGnTTTGGTC GCGCCCAGTT TCAGCGCCGG AATAGAGACA TCTGTTTTGC         300

CATCCAGCAA ACCTTGTAAT ACCGGAnTCC GCAGCAGCAG GCGGTTTCGC                    350
```

    (2) INFORMATION FOR SEQ ID NO: 2229:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 58 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2229:

```
AACTAAAAAT ACTATATAAA AAAGGTTGTT ATAATTTAAT GGATATAAAT AAAAACGA          58
```

    (2) INFORMATION FOR SEQ ID NO: 2230:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 50 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2230:

```
GGGCGAAAGC TGGACGGAGC CAACGTCGCG TGAGTGGATG GAAGGTTCTT                    50
```

    (2) INFORMATION FOR SEQ ID NO: 2231:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 50 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear

AGCCATACGT GGTAAGCACA TGCTAAATTT GCCAGCCTGA AAATGTTTAG   50

(2) INFORMATION FOR SEQ ID NO: 2232:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 132 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2232:

TGTATCATTT TGGCAAAATC ATAATCTTTA TCGTCGAATA CAACTACTTT TAAGTTTAAT   60

GATGAAGGTA CGCATTGTGT AATCACTTCA TCTAACTTTT TTAAATCAGG TGTCATAGTT   120

GAACTTGGnG GT   132

(2) INFORMATION FOR SEQ ID NO: 2233:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 78 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2233:

GATCTTGAAG CAGTTGAAAC ATATGTATCA GATGCATTAA GACAAGTACA CTTACAATCA   60

GACATTTTTG CTGTATCA   78

(2) INFORMATION FOR SEQ ID NO: 2234:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2234:

TTTAGGCACA GACGGTAATA AGCTACAATT TTCATAAAAT CATCTCCTTn   50

(2) INFORMATION FOR SEQ ID NO: 2235:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 54 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2235:

ATCCTGGAAA ATCTGGTAAG ATATCTTGGA AATAACTAAT ACCAATTCCT AAAA   54

(2) INFORMATION FOR SEQ ID NO: 2236:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2236:

GGGTGATGGT CATTGACAAA GTCAACTTGT GATAAGCCAT GGATATTTTT CGTT   54

(2) INFORMATION FOR SEQ ID NO: 2237:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2237:

TTATTTACTT TAAATTTCTC AATCTACAGT GTAATCTTAT TTCTTATTAT   50

(2) INFORMATION FOR SEQ ID NO: 2238:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 74 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2238:

CCTTAATGGG TTTTGGGGGG GGGCCCCCCC GGCCCAAAAC CTTTGGCCCA ATTGGTTCCT   60

GGGTTAAGGA AAAA   74

(2) INFORMATION FOR SEQ ID NO: 2239:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

CCACCCATGG CGCTTGACAA AATATGGATG GAACATAACC ACACCGTCCA AGTTCACTGT   60

TAGCACCGTG T   71

(2) INFORMATION FOR SEQ ID NO: 2240:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2240:

CAGCTAGGTA GTTAGGGATT CGACTCGTAA AACGGATTAA TAGGTTTTAT AAGAAGGGGG   60

TTTG   64

(2) INFORMATION FOR SEQ ID NO: 2241:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2241:

CTTGACACGT ACATCTAATA CGACAGTCTG TGCGTTTAAA ACCTTTTGGG TCAAACTG   58

(2) INFORMATION FOR SEQ ID NO: 2242:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2242:

GACTCATCAC CGnTTGTTAA GAnATACAAT TTATTACCCA GCAnTTAACA   50

(2) INFORMATION FOR SEQ ID NO: 2243:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

AAATTTGGAT TGGTTGGAAA TTTACAGTTA AAATTTAAAG GGTGGATGGA AAAATTTTAG   60

GAACTTCTAA G   71

(2) INFORMATION FOR SEQ ID NO: 2244:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 50 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2244:

GGGGGCCCCT TGGGGGTTTG GGTTTTGGGG GGCCCCCCTT TTAAAAAnTT   50

(2) INFORMATION FOR SEQ ID NO: 2245:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 52 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2245:

TTATAATTTT TGAAAATAGA AGAGGGAAGC CTTAAATTAC CAAATGGATT TA   52

(2) INFORMATION FOR SEQ ID NO: 2246:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 55 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2246:

ATTAGTTGAA AAGTACAATA TTCCGCAAGT TACCAATCGA TACAGGTATT ACAAG   55

(2) INFORMATION FOR SEQ ID NO: 2247:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 50 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2247:

(2) INFORMATION FOR SEQ ID NO: 2248:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 107 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2248:

GGGAAGGTAA AACTTCCTGC TTTTTTTATA AGTATTCATA CTCTATTGCT ATATTAGTAG   60

AAACCGTAAA ATCAGTCATT CACATACATT nTGAAACATC TAAATAG   107

(2) INFORMATION FOR SEQ ID NO: 2249:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 168 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2249:

GTTGGATACC TGnAACTAAA TAACTATTCT TTAAAAGTTA AAAACCAACC ACTAGTGGCC   60

ATTGGGGATT AAAATTCCAA CCTGGGCCGG TCCATCCCCA TGGTGGGTAA AATGGGGGAG   120

GGAAAATCCT TATTAGCCAA AGGATTCCTT ACCTAATAAT AGGGGGAA   168

(2) INFORMATION FOR SEQ ID NO: 2250:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2250:

TTTAGTTGTG ACATACTGAG AACTGTAGTA CTTAGTGCnA TACCAAAGGG   50

(2) INFORMATION FOR SEQ ID NO: 2251:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

GCAGAACATA CCACGTGTCG CTGATTACCA ATACAGTAGA TCAAGATGGA CTCGATTGC   59

(2) INFORMATION FOR SEQ ID NO: 2252:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 52 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2252:

GTTTGTGTTT TAATTTTAAG GGGAAGGGAT TTTTTTACCA AATGGGAATT TT   52

(2) INFORMATION FOR SEQ ID NO: 2253:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 80 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2253:

AGTGTAATTA GAAAGGCAAG TACACCTGTT TAAAGTTTAT CTTCTAAGAT TTGTTTACTT   60

TAGAACTATA GCAGTTAATC   80

(2) INFORMATION FOR SEQ ID NO: 2254:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 66 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2254:

GTAAATGACA GAGGAAATAT AACAATGATT AATAATGTTA CAGCATTTAC TGCAAATATC   60

TACTAT   66

(2) INFORMATION FOR SEQ ID NO: 2255:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

ACATGTGTTA ACTCTTTGGC AATATATCCT GTTTCTTCTT CTAATTCACG   50

(2) INFORMATION FOR SEQ ID NO: 2256:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 69 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2256:

AATCTTTTAT AGGAAAGAAA GAAGAAGATG TTATCAGTTG CGATTATCGG CCCAGGCGCT   60

GTCGGTACA   69

(2) INFORMATION FOR SEQ ID NO: 2257:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 64 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2257:

TAGCGGGAGA TAGAAAAACC ATTCCGCATT AGCTTTGGTC AAGTTGGGAA TGGGTAAAAA   60

AATA   64

(2) INFORMATION FOR SEQ ID NO: 2258:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 106 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2258:

GGTTAAGGTA TGGCGAAATA TCTCCAACAA CACTTCAAAA GGTTCAAGAA AATAGAAGTC   60

GACTGAACAA TGTCATTCAC ATGTGTGCGT CATGCACACC nTATGT   106

(2) INFORMATION FOR SEQ ID NO: 2259:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 79 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2259:

CGGAATAACT GACTATGTAT CATTTGATGT TATTAACATC AATATTTTTG GTTAAATGAT   60

ATGCTAGAAA TAAAGCATA   79

(2) INFORMATION FOR SEQ ID NO: 2260:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2260:

GCTGGnTGTT AnTGGCAGAG CATGTGAGCT GGATAATCAG TTGGAGAGGC   50

(2) INFORMATION FOR SEQ ID NO: 2261:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2261:

nCCATTAATG ACCGAGATTA GTGAGCATGC ACAAATTGTT ATGGTAGGAT   50

(2) INFORMATION FOR SEQ ID NO: 2262:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2262:

AATGAACCAC ATAATGACAA CTTGAATGAC AATATGAATA TGATGTCAAC A   51

(2) INFORMATION FOR SEQ ID NO: 2263:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

CATTAGGTGC TTATATAAAT TACTTTGTGG TGGCTCCAAA ACTTCGGGTT AAAAC   55

(2) INFORMATION FOR SEQ ID NO: 2264:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2264:

TTTCnTCCCC CCCCCGGGGT TTTTTGGTCC CTTTTTTTTT TTAAATTTCC   50

(2) INFORMATION FOR SEQ ID NO: 2265:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 52 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2265:

TCATTCATAG AGGTGTAAAG ACATAAGGGG AGCTTAACTG CGAGGACCTA CA   52

(2) INFORMATION FOR SEQ ID NO: 2266:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 55 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2266:

AGATGATGCA ATAATGGTGC AGTATAGAAG TACTGAGCAA TGCAAATTTT AGACG   55

(2) INFORMATION FOR SEQ ID NO: 2267:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 51 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2267:

GTTCATCACA TTTATTACAT TCAGCGTTGG AATCAGTACT GGGTTATCAT G   51

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 54 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2268:

CTGTTGACAA CAAATTAAAA ATGACAACAT GTCGTAGTTA TAGTTAATTG ATTG   54

(2) INFORMATION FOR SEQ ID NO: 2269:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 312 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2269:

AACCAAAAAG AAAGCAAGGT CAAGGAAATT TCAGCGnGAC GTATCTTTAG TTTTGAATAA   60

GCATATTAAT ATGGTGATAA TATGCAAGAn AACCTGTTTA TTCGATTCAA TGAAATTATA   120

TTATTAATAT ACTTAATCAG TATCATTTGC TATTTTTATG ATTTTGTACA AAAAAGTCAT   180

AAGATTAGAA GTTTAGGCAT ATATTTATTG GGGATTGTTT GGGTTTTACA AACAATCTCT   240

TTATCTATTT TTATTATACA AACTAGACAT ATTCCATTAG GGnCTATTTC AGATGTATTC   300

TATACTTTAA GT   312

(2) INFORMATION FOR SEQ ID NO: 2270:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 58 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2270:

GTTGATGGAT TCTCTTGGTT TGGTGTAGTC ACAATTTCTG AACTGGCCCT TGTTTACG   58

(2) INFORMATION FOR SEQ ID NO: 2271:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 50 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2271:

CGTTCAGACG CTAAATCAGG CACCAGGTTG TACAATTGTC CTGGTTCTTC   50

(2) INFORMATION FOR SEQ ID NO: 2272:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2272:

CAGGTGTTGG TAAAACATTT GAGATGCTTT CAAATGCCAT TGAACTATTT CAAAGTAA   58

(2) INFORMATION FOR SEQ ID NO: 2273:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2273:

TTATAAATTG GTGTAACAAT TTCATACACA TGATCATTCT TTGATTGAGG TAAAAATGAT   60

TCTACTAAAC GTACACGTTT ATGCTTCTTA TATTCTTTCA TCAATAAATA TCTATGATTA   120

GCTAATGATA AATTTAGTAG AAGCTTGTTA TCTCCATAAA CTAAATTCAC GATATTAGGT   180

ATATTGAATT GTTCTTGATA TTTCAAAAAT TGTTGATCCC ATTCTTCATT TTTAGGTAAA   240

GGTAATACCA TCTCGTTAAT TTTCCAATAT GCTGGTTTAA GAATGACATT TTTATATCTG   300

ATTCGTGGTG AATAACTAAA TGAATCAATA CTCACATCAT TCATAGGTTC AATGCATTTC   360

ACAGATTCCA TTGAAATTTC TCGTAACAAT CGATATnAAT   400

(2) INFORMATION FOR SEQ ID NO: 2274:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2274:

GGGTACAAAT TTGTnGATGA TAGAAAAGTT CGTATCGCTA GAAAGTCTGG   50

```
        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 65 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2275:

TGATTTACCA GTTGATTACG ACAAAGAAGA ATTTTCAAGA ATTGTTGAAG CATCAAAACG          60

CATTA                                                                      65

    (2)  INFORMATION FOR SEQ ID NO: 2276:

        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 55 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2276:

ATGGCGTTCC ACCAGCAGTC AATAATCCTG TTGGGATAAA TGCCAATACT GTCGA              55

    (2)  INFORMATION FOR SEQ ID NO: 2277:

        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 76 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2277:

TAATAAATCA CGTGCATTTA CGCTCACTAG CTTTCATCTC CTCATTTTTG CTTTTCAAAT          60

TTATTAAGTA TGAATA                                                          76

    (2)  INFORMATION FOR SEQ ID NO: 2278:

        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 65 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2278:

GTGGCTTTGT CTGTGTTATT GTAGTTTTGT TTCGCTGCGT CCAGCTTTGC TGCTTTTCCC          60
```

(2) INFORMATION FOR SEQ ID NO: 2279:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 69 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2279:

TTAAGTGCCA AAGTCCTTGG TAGCCAGAAT GAACCACCAA CCTCCATTTT TCCAAAAATG   60

GTCTTACCT   69

(2) INFORMATION FOR SEQ ID NO: 2280:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 67 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2280:

GGATGGAATT GGGTTAAGAA TAAAAAGGT AATAATTGAG TTTATGATAA TAATAATAAT   60

ATTGAGA   67

(2) INFORMATION FOR SEQ ID NO: 2281:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 76 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2281:

TTGTTACTTC GGCACGGATA AATCCACGTT CAAAATCAGT ATGAATGATA CCAGCACATT   60

GAGGTGCAGT CATACC   76

(2) INFORMATION FOR SEQ ID NO: 2282:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 137 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

AACCCAGAAG ACTTATTATT AGAATCTTAA TCCACAACAC AAAATAGTTT ACTATTCCTA   60

AAAGCGGGAT TAAATCAATA ACAAACAGCA GTAAGATTAT TTCCTAGTCG AAATATCTTA   120

CTGCTGTACT TTATTTn   137

(2) INFORMATION FOR SEQ ID NO: 2283:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 52 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2283:

ACAAAGATTT ACTATTTAAC TAATTTATAT GAAGAATAGC TTTCCCTAAT AA   52

(2) INFORMATION FOR SEQ ID NO: 2284:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 51 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2284:

ACTCCTGCAT ATCACAACTA GATTAAATAT ACATCAAACA GATATAGTAA A   51

(2) INFORMATION FOR SEQ ID NO: 2285:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 77 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2285:

CTAACATGTG TGAACGATAT GCAAATTCAA TATCTCATTC ACGCTTTGCA CTTTATTACT   60

ACAATCAACG TAACTAT   77

(2) INFORMATION FOR SEQ ID NO: 2286:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 58 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2286:

AAACCTGTAT TTTTAATAAA CAATCGCTTG GACCTATTCA CTGCAGCTCT TCTGGGAC   58

(2) INFORMATION FOR SEQ ID NO: 2287:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 204 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2287:

AATTCATAAA ACCAATAAAT AAGAATTTTA TAGTAAAAGG AAATGGAnTA GAGTTGGCAG   60

ACTTATACAA TATTAAAAAC AAAGAGCTTT TCACGATTAA AAGAGGAATT AATACATCTT   120

TATCTCTTTA TAGTCTAGAA CAGGAATATA ATAACAATTA ACGCCTTAAA ATATCCAGAA   180

TCATATAATT TTGAAGAATT AATA   204

(2) INFORMATION FOR SEQ ID NO: 2288:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2288:

GCTCGTAAGG CGTCAACTGT GGCCTTGGGT GCTACATGTA AAGGTTACTT   50

(2) INFORMATION FOR SEQ ID NO: 2289:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2289:

TCGCTTCGGT GGTAAAAATG TCGTGGAGGT CCCGTTGCAG ATGGTTTTAA ACG   53

(2) INFORMATION FOR SEQ ID NO: 2290:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 68 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2290:

TTGGAGGTCA ATGTTCGGCG TAATCTTCAA TGTTTCCGTA CACAATTGCT GCGGTTGACA   60

CACATACG   68

(2) INFORMATION FOR SEQ ID NO: 2291:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2291:

TTCGACGAAT TAAAACAAAT CCTTTTATAT GTTGAAGTGT ATTCGAGATT AAA   53

(2) INFORMATION FOR SEQ ID NO: 2292:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 63 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2292:

ATCAATTGTC AACATCTAAT ATTCACTACC AATTATATCG CCACATGTTT TTTAGCAGTA   60

ACA   63

(2) INFORMATION FOR SEQ ID NO: 2293:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2293:

CGACTCAGGT CCATCAAGAG AGACACATTT CGACTACAGG TTATTACTTC TTTGA   55

(2) INFORMATION FOR SEQ ID NO: 2294:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2294:

AAATTTTGGT TAATTTTAAA ACCAAAAAAC CTTGGAAGGA AATGGCCCTT TTCCCAATTT   60

T   61

(2) INFORMATION FOR SEQ ID NO: 2295:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 158 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2295:

AATCTTAAAA CCTATGGCGT CTATTACATT CCCAAAACCT ATTTTCAGnA ATGTTACCAA   60

TTAAACTTGC CGGGGTATGG ACCAGGGTAC CAGGCTAAAA ACTGGAAGAA AGGAAGGAAT   120

TTTAGAAAAT AATTTATTAA CATGGACCAG GTAACTAA   158

(2) INFORMATION FOR SEQ ID NO: 2296:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 68 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2296:

TGTTCCAACG ATGAATGTTT GCATGCTTTG TTGCACTGAA ATTGATGAGT TGCTACTTGC   60

AATCCTAG   68

(2) INFORMATION FOR SEQ ID NO: 2297:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 72 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2297:

GTAGGGATTT TTTTTAACCG GGATAGCCCA ACCAAAATTT AATTAATTTT GGGTTTTTGG   60

ATTGAAGGAA TT   72

```
(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 213 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear



    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2298:

AAAAATTnTA CCAGGTGAAA AATTATTTTG GTAGGATTTA AATnTAATGG TTTAAATGGT          60

GGTTTATTAC CTAATTTAAA AATGGTTAAA AGGGCCTTTA CCATTTTTAA AATTTAATCC         120

GCCTTTTGGG AGGGGGATTT TAGGGATGGT CCAGTTAGGA CCCCATTACC ACTGGAAACC        180

AACTTAAAAT TTGACCAAAT TTCCTGGAAA AAA                                      213

(2) INFORMATION FOR SEQ ID NO: 2299:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 159 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear



    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2299:

TATTTTTAAA GGAGGGTAAT AATCTTAATT TAAGTTCATT ATTTTTACTT TCATTATAAA          60

TATTTAATGT TACTTTCTTA TTTAGATAAC AATAAAAAAA TATAATCTCT nAAAACCCAA         120

TGAAACAGCT GCTCCAAACA ATTAGTTCTT CTAATTGAA                                159

(2) INFORMATION FOR SEQ ID NO: 2300:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 65 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear



    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2300:

ACAAGGTCAT TCGGATTTGA CTTTGTTTCA ATTGTTAAAT TTTGCTCCAT CAATTGTCTA          60

ATTCT                                                                     65

(2) INFORMATION FOR SEQ ID NO: 2301:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2301:

TTTATTCTTA TTTAAAAACC CAnTGAAAGT AnTCTTTnCA TTAnTAAAAA   50

(2) INFORMATION FOR SEQ ID NO: 2302:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2302:

GAGATATATG CATGAGCTCT ACGACTTCTT TAGGTTTCAT GGCGACTATC CTGGCAGGGA   60

TG   62

(2) INFORMATION FOR SEQ ID NO: 2303:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2303:

ACCAATCCCG TTGTTTTGGT TTTTTAAAAA AAGGAAATTC CAAAAATCCC CCATTT   56

(2) INFORMATION FOR SEQ ID NO: 2304:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2304:

TTTAAAACCC AACGGGTTTG GTTAAAATGG CCTGGGCTTT TCCAAAACTT GGC   53

(2) INFORMATION FOR SEQ ID NO: 2305:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2305:

CGAACAGGTT GCCACTGTAA GATCTGGTGG CATTTAATGG CAATCGTATT TTATTTGGAG   60

(2) INFORMATION FOR SEQ ID NO: 2306:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 74 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2306:

CTTTATAATG GCGGCGCACT TGGCATCTCT GCATTCAGTT ACACGCGGTG GCAACACAAA   60

ATTTAGGGAA TTCT   74

(2) INFORMATION FOR SEQ ID NO: 2307:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2307:

TGTCCATGCA CAGCTTTATT GGAATTTACC TTTTTACAGG CAACCGCTAA AGA   53

(2) INFORMATION FOR SEQ ID NO: 2308:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 76 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2308:

TAAATGATTA TGGGAATATC CAAAATTATC GAGATCTAAT ATGAAGTGAC TGCACACATA   60

TCAGCTCTGA ATGAAT   76

(2) INFORMATION FOR SEQ ID NO: 2309:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 117 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2309:

TCCTCAAAAT GTGAGTTAAT AGTCGAGTGG AAGCTGTGAC TTGAGCGACG ATACATCATC   60

AnACTATCAA TAATGTTTGC ACATCACTTT TACTACTATC ATTTGATGTA TAAATAC   117

(2) INFORMATION FOR SEQ ID NO: 2310:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 52 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2310:

AAACTCATAT CGCTTCCGAT AACCAACCCT GCTGCTGTTG GTACAAATTG TC   52

(2) INFORMATION FOR SEQ ID NO: 2311:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 56 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2311:

AACACTGGAG TCCTAATGTC ATCAAACATC TACCTATAAG ACCTTATATA ATCGTC   56

(2) INFORMATION FOR SEQ ID NO: 2312:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 72 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2312:

GATAACATCA TAGGCCATAA CTTCCATTTA GGCCATCAGT TATAGCATGC GGACGACATA   60

CTGTGCCATA TG   72

(2) INFORMATION FOR SEQ ID NO: 2313:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 52 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2313:

CATCTAATGG GAACGTGTCG ATCCTAGTCA GTATAGTCAT CGGCAGGTAC .GA   52

(2) INFORMATION FOR SEQ ID NO: 2314:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2314:

TAAACTGAAA TTTAATTTTC GGATGGTATT GTTATTAAGA AATAGACATA ATTTGTGCTG   60

GATA   64

(2) INFORMATION FOR SEQ ID NO: 2315:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2315:

CTAGTTTAAA TTTCTTAAAC TTCTACATCA GTAAAAGGCC GCTCTGGGAC CATACAATC   59

(2) INFORMATION FOR SEQ ID NO: 2316:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2316:

GCATAGTAAC TTAATTGATA GGAGATGAAA ATCCGCAAAG TCATTGGAAG GATT   54

(2) INFORMATION FOR SEQ ID NO: 2317:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 150 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

GTATATGCTG GAAAGATAAA GTATGGAnAA TGCATGGCGA ACATTTTGTA AGCAGAATGA   60

GCTATAAGCG TTGAATGGGT TTGAACGTAA ACAATCGAAC AATGATATGT CAGACATACT   120

TGCTTTAGAG CACATTTAGA GAGCGACATG   150

(2) INFORMATION FOR SEQ ID NO: 2318:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2318:

AAATCATCGA TGTTAAATAA TTTAATGACA AGGATTAATG AAAGACGGAT TG   52

(2) INFORMATION FOR SEQ ID NO: 2319:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2319:

TTAAGGAAAC CTTGGCCAAG GTTAAGGAAA ACCGGGGGTT CCAAGGTTTT TA   52

(2) INFORMATION FOR SEQ ID NO: 2320:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2320:

ATGAAGTTGA TTTAGGATGA AAATTAATCT TGGGATATTT AATACTTTGT   50

(2) INFORMATION FOR SEQ ID NO: 2321:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

CTAACGCTAA GGGCGACGGA TGGTGGTnAT GTCAAAGAGA CAAATAGGAT   50

(2) INFORMATION FOR SEQ ID NO: 2322:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 108 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2322:

CGTGGTGATT AATTTTTCGT CGCGTTTTGT TTCCTTTCCC CAGTCATGTT TTATCATTGT   60

GGGCATCATT GCACCTGGGT TCCATATTAT GACGTCATTT TTTAnAAT   108

(2) INFORMATION FOR SEQ ID NO: 2323:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 212 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2323:

GTCACCGAAT TTCGATTTAT ATTATCACTC AATTTATTAT CTTGAAGCAC GCGTTAAATC   60

GTCTTTAAAT TGnAACAGTT GCTACTTTAT TGTCTTTACC ATTGATCTGA ATTTGATCCG   120

CTTTAAGTCC ACTATCTTTT ACAACTTGCn CTACCTTTTG TTGAGTAATT GCTTGTTTAG   180

ATTGGAAATC TACGCGTGTA CCACTTGAAA AA   212

(2) INFORMATION FOR SEQ ID NO: 2324:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 133 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2324:

TCATTTGTTT TTAATACGTT GTCAAAATTA CCAACAAATG ACAAATTAAA TTTTGCAATA   60

CATATCAAGG TGTTATTTTT TTCCTATTTT AATTATGTAT AACGCATTAA AAGTGACGTn   120

AATATTCAAA GGA   133

(2) INFORMATION FOR SEQ ID NO: 2325:

```
        (A) LENGTH: 216 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2325:

ATGAACGACC GTGGACAGAC AATATTTAAA GCATTTAAAA ACAGCGTTCC CAGAAAGACA   60

ATATATAACC AATATTAACA AAAGCAATGC ACATTACTTC ACAAATGAAA TCAAAGCAAC   120

ACACATATAC AATGCAATAA GCGGGCAACA ACAAACAGAT TTCAACACGC CTGTCATACA   180

GCAATATCGT TAACAAATGA CAnCCGCCnT TTAGGC   216

(2) INFORMATION FOR SEQ ID NO: 2326:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 141 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2326:

TGACCATATG ATTGAGGAAG GTTTTATTGA TCCTAAGTAT CGTGCTCTTG CACCGTTATG   60

CGACACTAAG GAATCATTAA TTGAATCAAT ATTAAATTTn AAACCTCTGG GTACTCGTTC   120

ATACGATTAA TCATTCTAAG G   141

(2) INFORMATION FOR SEQ ID NO: 2327:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 55 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2327:

TGAAACTGCA GCGTGGCCGA GTGGGGGTTG TGCCAGGTGA CCCCAGATGG GCGTG   55

(2) INFORMATION FOR SEQ ID NO: 2328:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 54 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

GAAGCCAGCC TAATTGGATA CCACCGGAAG TAACTTTTGA CCAGGGCCGT CGCA   54

(2) INFORMATION FOR SEQ ID NO: 2329:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2329:

GTTCCCGGGT CCAGGCCGTT GTCTTGTGCC GGGGTGTTTG GTCCTTGGTT GTGT   54

(2) INFORMATION FOR SEQ ID NO: 2330:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 190 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2330:

TATATTATAT ATTTAACTGC TGTGATGTAT TCTGAAAAAA TAGTAGTATT GCCTATAATC   60

ATCTATGCCA TTGTGTTTGT AATAATTGGT ATCACTTATA TCTTTATAGG CGACAGCTAT   120

GATCAATTAA CAAATTTCAA TGTGATTTTG TATATGGGGA GTTTGTnTTA TGCATGGATG   180

GCTATTAGAA   190

(2) INFORMATION FOR SEQ ID NO: 2331:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2331:

TTTTCACCTC GTGTTTTAAA TTCAATTGAA TCTAAACTAA AAGTACCTTT AAGT   54

(2) INFORMATION FOR SEQ ID NO: 2332:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 246 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2332:

```
TTCTAAAAAT ATTAACGAAT TATACAACTT TAAGAGTTTT TAGTATGTAA ATATTCTTTT    60

CATATTAATA CAATACACCC CTATATATGC TCACTTGTTT GAATTAATAA ACTTTAGCAT   120

TCTGCAAATA ATATTTTAAA AATAACTATA CTTTTTATTT ACCTATTGAA AAATAGTGTT   180

ATCATATTTA TTAAGAAGCT ATTTTTATAC TAGTAGGTGT CAGTCATGAA TAACATTTTG   240

TTAAAT                                                             246
```

(2) INFORMATION FOR SEQ ID NO: 2333:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 52 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2333:

```
CCTTCTAACA TCTTTTTACC ACTCATTGAA ACATGTGATC CTAATAACAT AA           52
```

(2) INFORMATION FOR SEQ ID NO: 2334:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 60 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2334:

```
AGAAAAGAGA CTGAAACAAC AAATTCAGGC AACTTTTGAA CAACAGAGAC ATCGATTAAT    60
```

(2) INFORMATION FOR SEQ ID NO: 2335:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 193 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2335:

```
CCTCAATCAG CTCCTAAAGA ACAAAATAGC GACTCGATTG ATGAGGAAAC AGTAACGAAA    60

AAAGAACGAA AAAGTAAAGT AACACAATTA AAGCCATTAA CACTTGAAGA AAAGCGGAAG   120

TTAAGACGTA AGCGACAAAA GCGAATCCAA TACAGTGTTA TTACAATnTT GGTATTGTTG   180
```

(2) INFORMATION FOR SEQ ID NO: 2336:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2336:

CCTACAGTCC CAACACTGTC AGTACACTGC CGATACCCAA CCTCTGGCCG GTCCGGCA   58

(2) INFORMATION FOR SEQ ID NO: 2337:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2337:

ATATTTTTnA TTTAATGGTT TTACTACTGC TACAACTATC ATAGGTGGCA   50

(2) INFORMATION FOR SEQ ID NO: 2338:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 378 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2338:

CTCCTGTAGA TTTAAAATCT CCTAAATAAC AAACGAATAA TCGGCCATCT TTATGTATTT   60

TGATTGCTGC AGGATTCGCT TTGTGACTTA CAAAAGGTCG TTTGATTTCC TTCGTTTCAG   120

GATTGATTTT GAAAATATTG CCTTCGAATA CATCCAATAA AAAGAGTTGT CCCTGCCGAT   180

CAAAGTTCAA TCCTTCTAGT TGCAATCCTT TTTTGGAAAT TTCAAGCCAT GGTTCAGCTG   240

TAATTGTTTG TAATTCACTT TCAGATATAA TTGGAACAGC ACTATTGGAC TTCCCGCnAT   300

AAAATAATGG AGGGnAAAnC TGGTGGGGAC ATCCATGAGC CATTCCTTTC CATTCCATTC   360

GGTTTTAACT AACCAATT   378

(2) INFORMATION FOR SEQ ID NO: 2339:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2339:

ATGAAAATAA ACTGTGTCTC CnGATGTATA CGTCCCTTCA AGCAGACTTC   50

(2) INFORMATION FOR SEQ ID NO: 2340:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2340:
TATCCATATG TGAAAAATGT CATATATGAG TCTAGTTTTG TATAAATGGA GACTCGAAC   59

(2) INFORMATION FOR SEQ ID NO: 2341:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 189 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2341:

ATTGATAAAA TATGATTAAG CGTTGTTGCA AATGACATTT TCTCAAAAAG CGCTTCACTA   60

TCAATTGGTA CTTGTGTGTn AATTTCAGCC AGTCGCTTCG ATAAATATAG TTCATCTAAA   120

TTGTCATTAA TCTTATTACG TTGCCCAGCT GATAATGCAT CAATGTTTTC AACCACATTT   180

TCAACGCTT   189
(2) INFORMATION FOR SEQ ID NO: 2342:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 165 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2342:

ATCAATTAAA ACAAAGCATA CAACAATTTG TTGATGTTGA ATCTAAATCA ATTTTAGAAC   60

AACAAATGAT TCATCAGCTT CAACAAATGG ATCGTTCTTA TGTAGAGATG ATTACAGAAT   120

(2) INFORMATION FOR SEQ ID NO: 2343:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2343:

CTTAACCCCC CTTTTTTCCC AATTTTAATG GGGAAAAATT GTAATTAACC TGGGC   55

(2) INFORMATION FOR SEQ ID NO: 2344:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2344:

GACAAATAAA CATGACCTGG ACAAAGAAGA ACAATAAACA AGCCTGGCAA   50

(2) INFORMATION FOR SEQ ID NO: 2345:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 111 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2345:

GTATTGCGAT GATGCATACG GGTATTGTTC TGATTAAATA ATATTTCATA TTTAATGTTG   60

ATAAATGTTG AATAAACAAT CCGCAAAGnG CACTTGATGA TAGTGCTAAG A   111

(2) INFORMATION FOR SEQ ID NO: 2346:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2346:

GCAAACAGTT TCCGTGTCCG TTTTCCAATT AAGTTAAGGA ACCCAAAGAG A   51

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 60 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2347:

TCGTAGGTGC CATAACACAC GTTACCTGGG ACTCATATGA AGTATTATGT CGAGACGACC   60

(2) INFORMATION FOR SEQ ID NO: 2348:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 118 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2348:

GTTTTTAATA GGCTCTTTAC GTATCTAAAA ATAATTGCAT TATTGGTGTG CCTTGATGTA   60

ATTGAATTAA AGTACCGTTT GGTTGTAACG TTTCAGGTAT ATCATTTTCA ACnATAAC   118

(2) INFORMATION FOR SEQ ID NO: 2349:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 176 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2349:

ATGACAGAAA GCAAAATCCC AATGTTGATA TACCGTTTTT GACACCACTT GATTATCATT   60

ATTTTTTCTT TAGCGATGGA TTTTATATTA CGATTTCAAT TCTTACTATC GTTGCATTAT   120

TGTCATTCAA ACTGTATCGT TTTTACTnTT ATAGACTTTT CGCAATAGTA ACATGG   176

(2) INFORMATION FOR SEQ ID NO: 2350:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 201 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2350:

CTACGACTGA CATTAACTGT GCAGATGTAC CTGGATTCTA TTTTTTCAAG AACAAATTGT   120

AATAATTGAT AGTTATATGG TGCAATGTCA CCTTCATCCA TTGAGCGCTC AATAATTTCA   180

GCTGCnAGAG CGGCnTGACT G   201

(2) INFORMATION FOR SEQ ID NO: 2351:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 158 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2351:

ATCGCTATAA CCTATCAGTG ATAATATTTG ATTGCATGGT GCACCATTTG AnATTTCACT   60

TAGAATGGTG GTACCTAATT GCTTATTTTT ATATGTCATT TGAAGATTTA AAAATTAAAA   120

ACTTTGATAC AGAGTGAAAC CATATTTCAA CAAATTAC   158

(2) INFORMATION FOR SEQ ID NO: 2352:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2352:

TCGTAATCAA AACATTTTGA ACAGGATTAT AGTAAGGGAA TTTTTGGATT TTAACTTGTG   60

TTTGTTCATT TTTTAATAAG AGTCGAGCTA AGTCTTGCAA CATCATTACT TGCTTGGCAT   120

CTAACTGTTC GTCATTAAAT TTTATGAAAC GATCACTCAT GTTTTATCCC TCTTTAAAAG   180

TTTAGTTCTA CAGCATTATA TATTGCTTGT TGTTCACGTT CATCTTCCAA TTTATCAATA   240

ATTGTACGTT TAATTGCACG TTCAACTGGC ATTACAGTGA TTAAATCACA CAAGTCTAAT   300

AATGCACGGG ATACTAGCGG CTTCTTCAGA AATTTGTCCC TGCTTAGACA TAGTACGTAA   360

ATCTTCATTG AAACTTnAAT AATTTGGTTC GATTTGGTTT   400

(2) INFORMATION FOR SEQ ID NO: 2353:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 127 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2353:

```
ATTAATGGGG TTAAATAACA TTTTGACTGC GAAAGATTTA TTCTTTTCAG GTAAATCATT          60

GATAGATGTA TATAGTCAAT TTGCTGGATT AGCTGAAATG ATAAATGTnT TTGCGAATGC          120

ACCATTT                                                                    127
```

(2) INFORMATION FOR SEQ ID NO: 2354:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 223 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2354:

```
ATCTCGCTGT TTTTATGAAA GAAAACTACA TTTTCGAGAG AATAAAAAGA TTTTTCTGAA          60

ATTTAATCTA TCAATTACAT TGATTTACTA ATATAATTAG AAAGTAAATT TTATTTGATC          120

AAAGTAAATG GGGGAAGTAC TGTGATAGAA AATAAGAAAA CAGTTGAAGA TACATATTCA          180

ACAGGCGCAA TTGTTGATTC AATATCATCT TCAGTnCAAA TGn                           223
```

(2) INFORMATION FOR SEQ ID NO: 2355:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2355:

```
ACACTTGTTC AAACACTCAC AATGATAAAG CATATTATCA GTATTGTAGT GTGTGGAAAA          60

TGACAGCCAT CTAAGGAGAA AAATGATGAA AAGAATATTG GTAGTATTTT TAATGTTAGC          120

AATTATATTG GCAGGTTGTT CTAATAAAGG TGAAAGTAT CAAAAAGATA TTGATAAAGT           180

GTACAAAGAA CAGAATCAAA TGAATAAAAT TGCCTCGAAA GTACAAAACA CTATTAAAAC          240

AGACATTAAA CAAGAAGACA GTAATACACA TGTTTATAAA GATGGTAAAG TCATTGTTAT          300

TGGTATTCAA TTATATAAAG nTCGTGAAAA AATGTATTTA TTTCGCATAT GAAnTAAAAG          360

GTGGTTAAGG CCAGAGGATT TAATCAGnGG AAAnTAGACC                                400
```

(2) INFORMATION FOR SEQ ID NO: 2356:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 344 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2356:

AATTTACTTT GTGCCACAAG GTTATCAATG TCTTTTGAAC CACCAAACAT TCTAGCGATT   60

AAGTGACCTC CATCATCGTC TGGTAATCTA TCCTCTCCCC CCACAGTTCT TTGTGCATGG   120

CTATTACGAT CCCCATCTTT TAGAGAGAGA TTGTCTACAT AAACTTCTTT TATGCGACCT   180

TTATGATCGG TTCGATATAT GTGACCAGTA GGTGTTGTGT ATTCAATATT CGCCTTTAGT   240

TTCTTAGGTn CTAAGTCTTG GCATAGTGTT CTCCGAATTC nAACCTTGGT GTTAGTTTGG   300

TGATTCAACA TACTTTTGAT GGAATTCATT TnCATGGGCT ACTT   344

(2) INFORMATION FOR SEQ ID NO: 2357:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 53 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2357:

TATGCGCCCC TGCTTGATCT TTCATTTGCG TCCACTCAAT TAGTTGTTTG CGC   53

    (2) INFORMATION FOR SEQ ID NO: 2358:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2358:

ATTTTTTCAC CTTCTGAAAT TGATAAATCT AGGTTATCGA ATATAGTCTT ATCGGCATAA   60

GATTTATTTA AATGTTCAAT TTTATATGCT TCCATACCCA TCTTCCTTCT TCTGTTGAAA   120

TCTCTACGTA CTTAAATCAG TTCTATACAT TATACACCTT TTTGAAATCA AAAGAAATCG   180

ATACCGTTAA GTGTCATAAT TTAATATATT GTTGCTTCAA CTATAAATAA AACTTGTTAA   240

GGCTTTGATG ACTATGCTAA TGATCTTTAT AATATACCTT TTTATCAACA CATATAATGT   300

AAAACATAAT ATAnAAGAAC ATAATAAAAA CCCGGATTGA TATTTTATCA ATCCGAGTTC   360

GTGTTTAGAT ATTATTTTTT AGAGTTTGCT TTAGGTCCTG   400

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 154 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2359:

TTAATGTCGC CATTTTTTGT TAGGTAGACG TATAAATCTG GACCTTTTGA TGATTTGTAG   60

TTAGTAAGCA TTAATTTACC ATTTTTAATC TCAGCTTTAC CTTCAACAGT TTCACCGTTT   120

TTAGAACTGA nTGTACCTGT TAGGTGTTTT GTTT   154

(2) INFORMATION FOR SEQ ID NO: 2360:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

. (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2360:

ATATGTCTTG TGATTTTTCA GGTGTAAGTT AGTATGCAAG TGATTATGAT TGATAGT   57

(2) INFORMATION FOR SEQ ID NO: 2361:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2361:

GGCATCAAAT TAGTAGCGAC TCACACGTGA TGCATCCTGT GTTTTGGATC TCATTTCT   58

(2) INFORMATION FOR SEQ ID NO: 2362:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2362:

TGTTATTATC GnAGAGGCTT TTCGCTTTGG AATAAGGTAT TACGTGAATG   50.

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 50 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2363:

CTCTTCTGGT CCCTGACATA CATAGGAGAA ATAGCnCCAT GTACAACGTG   50

(2) INFORMATION FOR SEQ ID NO: 2364:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2364:

ATTGCCAATG TCGTTAGTTC GTGAGGCTGT TGGTGAAAGT TGTGTTTGAA   50

(2) INFORMATION FOR SEQ ID NO: 2365:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 111 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2365:

CCATGATTTA AATCATTGAT TAATGGTGCT TGTTCTACAT CTGTGTAAAA TTCATACAAT   60

TCTTTAGCAT CGTCGAATAG TTCATCACGA CGTTGGnTAA ATTCTTCTTC T   111

(2) INFORMATION FOR SEQ ID NO: 2366:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 139 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2366:

TAATGCTGAG CGTGTTACTT TAGTTGGATC AACGATACCT TCTTCTAACA TATTAACCCA   60

CTCnTTTGTA GCAGCGTTAA AACCAACACC CGGCTCTGCG TTTTTCAAAC GTTCTACAAT   120

(2) INFORMATION FOR SEQ ID NO: 2367:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2367:

CCTGATTGCA AAGTACAGCA AGCACTACAG ACGCCTAAnC ACTnACACTA   50

(2) INFORMATION FOR SEQ ID NO: 2368:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2368:

AAAATGGTAT TGCAATTAGT AATGTTACAA CAAGTGTTGT AATAGCTGCA TAAAT   55

(2) INFORMATION FOR SEQ ID NO: 2369:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2369:

TATAGGATGA AAATCCTGCC AAAAGATTAA GGGGTGGCCT AATGAACCAT G   51

(2) INFORMATION FOR SEQ ID NO: 2370:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2370:

TTGCTCGAGG TGGTAAATAC GCAAAGTTTA TTTGGTTGTG CTAAGAGAGA AA   52

(2) INFORMATION FOR SEQ ID NO: 2371:

```
        (A) LENGTH: 66 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

5

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2371:

10   TAATTTGAAT AAGGTGGAAG TGATAAACAG TGCTTTGCGA ATCTAGAGTC ATTAATCAAA   60

ACCCTA   66

    (2) INFORMATION FOR SEQ ID NO: 2372:

15   (i) SEQUENCE CHARACTERISTICS:
```
            (A) LENGTH: 65 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```
20

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2372:

25   AGACAGGTAC TGTCCTACGG TATGGAGCAG AAGCGGGAAA GCTGCCCAGA GCCAACTGTA   60

GACAA   65

    (2) INFORMATION FOR SEQ ID NO: 2373:

30   (i) SEQUENCE CHARACTERISTICS:
```
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```
35

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2373:

      TTGCAGTGAC GGCTTATAAT CATTCCAAGC GAACAATTAG ACATTCCATA TAAAATATAC   60
40
      AGATGGCTTT CAGTAGAGTA GTGGATTCGG ATTCACGAAC TATACTGGAA GCTTTTTATT   120

      ATAAATGAAG AGAAGTTATA TTTTTAGCAT GTATAGTTGA ATACTGGGTT AAAATACCAT   180

45   ATTAATAATG AAGTAAAGGT ATGAGTGATT ATGAAAGTGT TTTGAATGAA ATATATTTAA   240

      TTGGTGATGC TTTTAATTGA AAAGATTAAC AGGATTCAAC TTGGTAAATT GTATTAAATG   300

      TGAGAAAATA AAAGTATATT CATTGAGAGA TATATGAGTC AATGATCGTT TTAAACAAGA   360

50   TAAGTGTATT TTAATATGTA AAAGTTATGT AATAAATATT   400

    (2) INFORMATION FOR SEQ ID NO: 2374:

        (i) SEQUENCE CHARACTERISTICS:
55   (A) LENGTH: 70 base pairs

          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2374:

CCTATCATGC CTCTCTCTCA CTGAATCCTT TAGATCCCCT TCCCTCCCTC TCCCCCCTCT   60

TTTCCCCTCC   70

  (2) INFORMATION FOR SEQ ID NO: 2375:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 50 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2375:

CCAAGTCAGA GCAGCAGTTC AGTTCGTCAG CnGTTCAGTT CAGAGCnGTC   50

  (2) INFORMATION FOR SEQ ID NO: 2376:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 50 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2376:

GTTGGTGAAG CTGTTGCCGA nGGAGAAGCG GGTATGGATC CTGACGGTGn   50

  (2) INFORMATION FOR SEQ ID NO: 2377:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 59 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2377:

AATTGCAGGA CAGGTCAAAG GCAAATGCAC GTATTCAGGT CATGCTCATG TGCATGTTG   59

  (2) INFORMATION FOR SEQ ID NO: 2378:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 229 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2378:

TTTATCATCG TATAAATCTA TATCTAATTG ATTAAACTTC GGGTGCTTAA CTAACTCTCT   60

CAATACACTT ACACCAGCAG TTCCCATGCC TATTATTGCT ACACGCATAT ATCATCCATC   120

CTTTTGTAAT TCAAAATATT ATATTTAAAC TATTACCTAT AATTATAGCA ATTTGGTATT   180

TCCAATAAAA TTTATnAAGG TAAGCnATTA TTTCACTTTC ACAACCATT   229

(2) INFORMATION FOR SEQ ID NO: 2379:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 116 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2379:

AGTTTTTTGT TTGACGTATT TAATTTACTA TTTGCTTGAT TGATATTTTT AGACATTAAA   60

TAGTGTTCTC CTAATCAATT TATTCTTCTT TATnTCAGCA TTATTCGCAC TGACAT   116

(2) INFORMATION FOR SEQ ID NO: 2380:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 136 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2380:

CAAATCTTAG CGGATGATTG GCATGTATAT TCTGCTGGTA TCGAAnCACG CGGTGTTAAT   60

CCCAAAGCGA TAGAAGCTAT GAACAGAAGT CGGCGTTGAT ATGTCGAATC GTACGTCAGA   120

TTTAATCGAT AATAAT   136

(2) INFORMATION FOR SEQ ID NO: 2381:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2381:

TTAATTGATA GCTTTTATCT GTAGGAAAAG CTATTTTAAA GATTTCTAGT GTATCTATAA   120

CTTTTTTGGG ACGATATTGA ATATTACAAT CTTTAAATGC CTTTTTAATA AAATTCAAAT   180

CAAAATCTAC ATTATGAGCT ACAAAAATGC AATCTTTTAT CTTATCGTAG ATTTCTTGTG   240

CAACTTGATT AAAATATGGC GCTTGTTGTA GCATATTTTC TTCAATGGAT GTTAACGCTT   300

GAATGAACGG CGGAATCTCT AAATTTGTTC TAATCATAGA ATGATATGTA TCAATAATTT   360

GGTTATTGCG CACAAACGTT ATACCAATTT GAATGATATC   400

(2) INFORMATION FOR SEQ ID NO: 2382:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 53 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2382:

TATTTTGTTA ATAAAGTTAA TATATGTTTG TTGTACAGAT AGTTCAGGAT ACA   53

(2) INFORMATION FOR SEQ ID NO: 2383:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 59 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2383:

CCCGAGCTTG CCCTCCTTCC CCCCTCTTCG CCTCCAGACG AAGTGCCCTT CTGTCCTTG   59

(2) INFORMATION FOR SEQ ID NO: 2384:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 110 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2384:

AGCCAACATC CCnGATGGTA CTTGCATTAA TGCATAACCT AGAGAGAAGA ATGATGCCAA   60

TAAACCAAAT TGTGGTTTTG TCATCCCTAA ATCATCCATC ATTTGCTTAG   110

(2) INFORMATION FOR SEQ ID NO: 2385:

2223

        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2385:

TGAAAGTTCT TTTAnGCATC AATTTTAAnA CTACGAGCGG ACnCTAATAT   50

(2) INFORMATION FOR SEQ ID NO: 2386:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 245 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2386:

GGCAATTTAT TGACACAATG CTTGAGCnAT TGATAGCAGG ACAAGAAAGA ATACTTGATG   60

AGTTAATAĆC AAAAATGGAT GCGACTGAAA AATTAACGCT TTATTTAACT AGTCATTATA   120

AACAGATAGA TTATGAATTT TTGTATCTCC TTTCAATGGA TAAATTGTTT GGAAATAAAA   180

GAAATAGATT AACATTAATT GATTTAGAAA ACATATTGGG AGTAGGAAGA GTAAAAATTA   240

GTnGT   245

(2) INFORMATION FOR SEQ ID NO: 2387:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 140 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2387:

CACAAAATTC GAAATCGTCA TCGGTGATAT GTTTAATACT TGGGAAAATA TAAAACGCGC   60

CTTCAGGTTG AGCGGTAATC TCAAAACCTA ATTTAGTTAA TTCAGATACT AAATAATTTC   120

TTCGTTCnAC ATAAGCTTCG   140

(2) INFORMATION FOR SEQ ID NO: 2388:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 120 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2388:

ATATAACATT GTAGGGCCTA ATAATTTATT TTATGTCTCA GACTCATACA ATGGTTATTT   60

AACTTATTTA CCACAAATTG AGCACTAAGA CTCACTATTA TCGATTCTTC TATTGAACAn   120

(2) INFORMATION FOR SEQ ID NO: 2389:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 85 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2389:

TCTAAATCCA GCATGATCTA CATCAAAGCT GAATTCACCT TTTTCATCGA CTTGCAAATC   60

AGGGAATTCT TGACCTTCAC CTAGT   85

(2) INFORMATION FOR SEQ ID NO: 2390:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2390:

GGTGTTTATA AAGCAGGGGC TGAGCCTCGG TCAGGACTGG ATACACAGGC AGTACGGGTG   60

A   61

(2) INFORMATION FOR SEQ ID NO: 2391:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2391:

TAAAGTAACC ACTTTAGATG ACATTTTAGA AGTTATGGGC CGAATGCAAA C   51

(2) INFORMATION FOR SEQ ID NO: 2392:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2392:

GGTCGGAnTC CCGGGTCGAC CCACGCGTCC GCATCAACCT AGnAGAAGCn   50

(2) INFORMATION FOR SEQ ID NO: 2393:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2393:

ATTTCCAAAC GAATTGAAAA ACGGACGTAA ATTCTTAACT AAAGGCGATA AATGT   55

(2) INFORMATION FOR SEQ ID NO: 2394:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 120 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2394:

ATAGGTTGCT ACTATTTATA TCGACTCATT TTCACTTACA AATATGACAT TGTCTCTAGA   60

ACACnAAAAT TAATTTGCGT CATATCTGCT ACAGTTTTGA GTGTGTTATC AAGTGTATTT   120

(2) INFORMATION FOR SEQ ID NO: 2395:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 261 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2395:

TGGACCATAG TAAAGCATTA CGGTCGGTTT ATTATTTTCT AAGGAAGTAT GTTTATATAA   60

ATCTATGCTC ATTTGTTTTT TAGCGTCTGT TTGACCTATT ATTTTAGAAC CAGCCATCTG   120

CTCTTTATAA AAATTTATTA CATCATCTTT TTTTAATGTT GTATATTCAT AGTTTATTTC   180

TATTATnTCA GAATCGTGAA AACTATTTAG TGATTGAnAT ACTCTTTTTG GAGGATTCTG   240

AATATAGATT TTCTTAATAT T   261

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 104 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2396:

GTTTTGAATA TAGGGGCTTT TATCACTCTC CGAAGTCTnT TCTAAGTTAG ATTTGGAAAA   60

TAACACTTTT TTAGTTTCAT TCAAGCGAGT CGAGTGACTC CAGA   104

(2) INFORMATION FOR SEQ ID NO: 2397:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2397:

GATTATCGAT CACAGTATGA TTTACGTAGC AATTTCTGGT ACATATACGC CTAT   54

(2) INFORMATION FOR SEQ ID NO: 2398:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 235 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2398:

GCTTCACCTT GAACTAGCAA ATAAGGATAA AACAAGCATT CTTTACATGT TTCTTTTAAA   60

TACGTTTGAT ATTTTAATAA TACTTTTTCG ATTTTACTCA TATAAGTTTG AAGTTCTAAT   120

TTTTCATTCT CACTTATTTT GTATATATTA CATTCATTAT GTTCTGTCAG AAAAATATAA   180

GGGTCAATAT TAATTTCGTC TATCAATTCA TAAATTTCAC TTAAGTATTT nTnCT   235

(2) INFORMATION FOR SEQ ID NO: 2399:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 111 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

TTTGATGCAC TTATTTGTGT AATGACATCT TTACAGTCTT TTCCTTCCTC CATCATTTTA   60

ATAATTCCAT TTAGTTGCCC TTGTATTCTA TTAATACGAT TAATCATTTT n   111

(2) INFORMATION FOR SEQ ID NO: 2400:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2400:

AAATGCTGGC TGAGTTTTGG GCCACCCGCA AAGGCACTGG ACCGGTGCGA AACC   54

(2) INFORMATION FOR SEQ ID NO: 2401:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 205 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2401:

AACCACTCAT CACTACTAAA ATGATACTTA AAAACAAAGT CTTAATACAC TTTTTCATAA   60

TATCAACTTC TTTCTATATT TAATACATTA ATTATACATC TTTnTnAAAT AAAAATATGT   120

GTAAAATTTT AAAACTTATT TAATTGATGT TTTAATAATG TATTATAGAA ATTATTGACA   180

TATGATTAAA AACCCTTAGG ATAGT   205

(2) INFORMATION FOR SEQ ID NO: 2402:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 140 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2402:

AGATAATCAT AGAGAAAGTC CACAGTCGGT AGAGGTGGTA GCTGAAAACA ACATACTATT   60

AATTATGAAG TGCTTTGTAA CTTGTCGAGA CGTTTGCCGC GAATCTATCA TGATGGTGAT   120

CAACGTTTTG TnACAAATGA   140

(2) INFORMATION FOR SEQ ID NO: 2403:

            (A) LENGTH: 58 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

5

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2403:

10   ATTTAACCAC TCCTCCAATG ATAAGATTGA AAGGCAAGAT GACCTTCCAA TCTTATTT   58

    (2) INFORMATION FOR SEQ ID NO: 2404:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 61 base pairs
15   (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

20

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2404:

    CAGCTTCTAC AATACGGCGT GCTATAGCAA GCATTAATGT AAATCCTAAT TCTGCAGTTG   60

                                                                                    61
25   T

    (2) INFORMATION FOR SEQ ID NO: 2405:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 217 base pairs
30   (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

35   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2405:

    AATAATCATT TTAATACGGT CTTCAGGAAT TGAAGTGTCT ACAGGTACAT ATCCACATCC   60

    TGCTTTAATG GGCACCAATC ATCCCAACAA TCATATATGG TGACATGTGA CCGAnTAAAA   120
40
    TCATCGGGTT TCTnACTACC TTGTAATCGA TGTGGCTAAT TTACTAGACT CATCCATTAA   180

    CTGTTGATAA GTTAATTCCA TCAGTTGTGT GTCTAAC   217

45 (2) INFORMATION FOR SEQ ID NO: 2406:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 228 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
50   (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2406:

55

GTAGTATCCA ACGTATTTCG GATTGCATCG AGTTGATTTT TATTATTTTC TTCAATGCTA   120

TCAAGCGCAn CTGTATTACG TCTTACTTTA GGTTTTATTT GCTCTATTGC CTTGATTGTT   180

TGATnTCTAA CATCAGTAAC AGCAGCATCT TGATTTGTAT TGTCTATT   228

(2) INFORMATION FOR SEQ ID NO: 2407:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 110 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2407:

CCTTTCGTCT CGCGCGTTTC GGTGATGACG GTGAAAACCT CTGACACATG CAGCTCCCGG   60

AGACGGTCAC AGCTTGTCTG TAAAGCGGAT GCCGGGnAGC AGACAGCGAT   110

(2) INFORMATION FOR SEQ ID NO: 2408:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 73 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2408:

GGAGACCCCA AAAATTTTGT CGTTGAAGAT GCCTTTTTTT AAGCGTTATT TGGCTATATC   60

AGTTTCTAAC TGT   73

(2) INFORMATION FOR SEQ ID NO: 2409:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2409:

AAATCATTAG AGAGGAATAG TTCCCTTTGT TACGCCAAAG ATTCGATATT GAC   53

(2) INFORMATION FOR SEQ ID NO: 2410:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2410:

CCATATGATT GTATAGGATC CATGACGTCT CCACTGACCC CTGACTCTAG TATC   54

(2) INFORMATION FOR SEQ ID NO: 2411:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 204 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2411:

GTTCCTCTTC AATTGTTATA TGTATATCAC AAAAATTATT TCATTATTTT ACCATTATTA   60

TTTTACAAAT ATTATCCCAA GAATACAATT CAAGAAATGA TTAACTTTAC TTTAGAATTG   120

TACCTTATTA CATTATTTAT GAAAGTACTC TCTCAATTAT AACnAAAAAG AAGGTGTTCA   180

ATACATnCAT ATTTAGTCTT ATAT   204

(2) INFORMATION FOR SEQ ID NO: 2412:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2412:

CAGTGGCGCA GAAACATAAC GCTCAGGGAA GCACAGCACC TCATTATGCC AAAGCT   56

(2) INFORMATION FOR SEQ ID NO: 2413:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 66 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2413:

TCGCTGGCGG GTCCCGCGCG CCTAGCGTGC TCATGTGCGG TGTTCTAGGT GTTGGGGTTG   60

CAGTCA   66

(2) INFORMATION FOR SEQ ID NO: 2414:

```
        (A) LENGTH: 65 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2414:

GGATAGAAAT GGGAATCCAC CCATCGGTGG GGGTACCAGG CTCTTCATAT GGCCTTGTGG   60

ACTTC   65

(2) INFORMATION FOR SEQ ID NO: 2415:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 267 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2415:

TTAAATAGAT AGAATAGAAT TAAAGAGACG ATGATAGGTG CTGCTATCGT CTTAAAAACG   60

ATGATAAAAG GATCAAAAAC ATATGATACT TTTTCGAAAA TAAAAATAAC AATACCCAAC   120

AATACTAGCG CTATTAATGA GAAGACTAAA TCATTCCCAC CAACAAACTT CATATACCGT   180

GATTCGGTAA ATTTTnnAAA ATTCTTTCTT ATATTCTTTT CATTTTCATT CAATTATAGA   240

TTCACCACCA CTTAAAATAT TCATAAG   267

(2) INFORMATION FOR SEQ ID NO: 2416:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2416:

TTAAACAAAT GAATATAGTA GTTCCATTAT CCTCACTTTT AATCGTTTAT   50

(2) INFORMATION FOR SEQ ID NO: 2417:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 177 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
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TTTGCTGGGA GTTGCATTAA GAAAATATAC ACATTTACTT GACATTCAAC TTGATAAAAA   60

ATTAGTTATT GCCATATGTT GCATCACATT TATAGGGATT TTAATATTTT .ATGTACGCCT   120

AATTAAAAAA TCATCTTTAA ATATTTATAA TACTAAAAAT AAAAGGTCAA AAATnTT   177

(2) INFORMATION FOR SEQ ID NO: 2418:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2418:

AAAATGAAGC GGTCGCAAAA TATAATGACG TGAAAGCATT TTATACTCAT GGACATTTAT   60

ATCAAGTCAA TCGAACAAGA GATTTATTAG CTGAAAAAGG ACTTGAATTA GGTTGTTTGT   120

TTGCATTTTA TGGACATACA CATGTGGCAA AATATGAGTA TATTAATGGT GTTCATGTTA   180

TTAATCCTGG AAGTATATCT CAATCTAGAA GTTCAATGGA AGAAACATAT GCTGAAGTTA   240

TTATTGATGA TCAAACTTTA CATGGCACCA TCAATTTCAA AAATCGACAT CACGAAACAA   300

TCAGTCATAC TACTTTTTAA ATAGAAnTAG CTATGGCTTT TTTTAGTTTA TAGACTGATT   360

TAACTAGGAG GTCGTGTCAT CCAATGTTTG TTTAAAAGTA   400

(2) INFORMATION FOR SEQ ID NO: 2419:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 53 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2419:

AGGGTGCCGA GTTAACCAAG AAAGGCCGTT GGTTGCCCCG GGTATTTTCC CCC   53

(2) INFORMATION FOR SEQ ID NO: 2420:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 58 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2420:

2233

(2) INFORMATION FOR SEQ ID NO: 2421:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 152 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2421:

ACCAGAAGAC AATAAGTGTA ATGATGCCTG TTCTAATACA GAATCTTTAC TTTTTATTGC   60

CTTTTCAAGT CGTTGTTCCA CTTTCTTAAT TTCATTGTTC ATGTTTAACT TTGCCAnGTT   120

AATCACCTTT GGTATTATCT TTTTCTTTAT AG   152

(2) INFORMATION FOR SEQ ID NO: 2422:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 307 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2422:

GTACGTTTTC ATTAGTTGTT ATATTTCCAT CTTGATAATT TTTTAAATCT TTAAAATCAG   60

CATACTGACT AAAAAATTTA AAATTTTCAA TTTTTTGTnT AAGTTTTTGT CTTCTACATT   120

ATCCAAAAGA ACAATCTnAT TATTTTTTAG TTCAACACGA TATTTTTTCT CATTATGATT   180

TTTGCTAATA TCATCATAAA CTTTATTTAC AAAATAATAA CCTGTTGCCT TTTTGGTATT   240

TCTATTAAGA TATAACACCA TGCCTTCATC ATCTAATACT CCTGGTTTGT TACTTTTTGA   300

AAAACCn   307

(2) INFORMATION FOR SEQ ID NO: 2423:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 56 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2423:

ATTGTGTTGT ATTTTAGACA AGACCTTCAA TTTTGGAGAT TTCACGATTT ACCACC   56

(2) INFORMATION FOR SEQ ID NO: 2424:

        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2424:

AGTCCTTTGG ATCGTCAAGA TTTCACACAT TTACAnTTAT TAnCTCGTGA   50

(2) INFORMATION FOR SEQ ID NO: 2425:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 248 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2425:

ATGTAATATT ACAATTCAAT TAGnAAAGAA CTTTATCTTT AATTGCTTTT CGATTTCATT   60

CATGTCATCT TCTGAAATTA TTATCGTTCC AGTAGGATCA GAATCATTTA TTTTGCTTAT   120

ACGTCTTTTG CTTATTGTTG TAATTGCTGA TATATTAACG TATGTATCTT TCCCTTTGTG   180

CTTGGAATAA ACACCTATCA CTCTATACAG TTCATTAGCT TTTTGAnTTA AGTTAGACAA   240

AAGCTTTT   248

(2) INFORMATION FOR SEQ ID NO: 2426:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 53 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2426:

CCTTATTATA TGACAGGTTG CCTAAACAAG TGCCTAGAGA AAAAACTAGC CCC   53

(2) INFORMATION FOR SEQ ID NO: 2427:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 173 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2427:

TATCCACTAA AATGATTTGC GCGTATTGTA ATATTAATCG TTCTACTTTT TATGATTATT   120

ACAGGGAGCA ATTTGATTTA TTGGATACCA TCAACTCnAA GCATAGGTGG AGG   173

(2) INFORMATION FOR SEQ ID NO: 2428:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2428:

TACTTATGTT TATGTCGCAA TAATTAATGT TCGAnTTAGT GGAATTGAAC   50

(2) INFORMATION FOR SEQ ID NO: 2429:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 68 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2429:

AGTCATCATA TTATCAATAA TACGCCGCGT TAAATCTGAT AAATTCATAT AGTCTGTATC   60

TAACTCTG   68

(2) INFORMATION FOR SEQ ID NO: 2430:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 374 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2430:

TGAATTGAAA ACGGTCGGTG AAGCGCTAAA AGGTAGACGT GAAAGGTTAG GAATGACTTT   60

AACAGAATTA GAGCAACGTA CTGGAATTAA ACGTGAAATG CTAGTGCATA TTGAAAATAA   120

TGAATTCGAT CAACTACCGA ATAAAAATTA CAGCGAAGGA TTTATTAGAA AATATGCAAG   180

CGTAGTAAAT ATTGAACCTA ACCAATTAAT TCAAGCTCAT CAAGATGAAA TTCCATCGAA   240

CCAAGCCGAA TGGGACGAAG TAATTACAGT TTTCnATAAT AATAAAGACT TAGATTATAA   300

GAGTAAATCC AAAGAGCCAA TACnATTATT AGTAATCATG GGnATTACAG TTTTAATAAC   360

(2) INFORMATION FOR SEQ ID NO: 2431:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2431:

TGACTTCGTC CAAGTACAAC TGCAGTCAGT ACCTACGAAA TCAAGATCAG CATGGAT   57

(2) INFORMATION FOR SEQ ID NO: 2432:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 225 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2432:

ATTCTTAATC GCATCATAAT TAATTAACGG ACGCATAACA AATCCGATAA TACTATTATC   60

TTTCCAAGTC ACTGACACTC CAAATTGATT TGCTTCnTCT ATCCATATTT GCTCAATAGT   120

ACCATCATTT TGAGTACACA CTTTTAATTC ATGTACATCA GACTGCCTTG TATAAGATTT   180

GAAAAGTTTC CTAAACTGCC AATAACTGnA CTCTCGCTTC AAATT   225

(2) INFORMATION FOR SEQ ID NO: 2433:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2433:

CGGCCTGACG TTACATTTCT TCAACTTCAC GTCAAAATTG CTTCGCAATA ACCAGGA   57

(2) INFORMATION FOR SEQ ID NO: 2434:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 104 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

TTAAACGTGT CTTTAATGTG GAAGTTGAAA TATTAGTCCG TAAAAAAATG AAACTTAAAA   60

AAAAATAATA TTTATATTTG TCGTACAAAG ATGAAAGCGA nAGA   104

(2) INFORMATION FOR SEQ ID NO: 2435:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 51 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2435:

TTTGCTAATC GTTTCACGGA TTGTGGGGAT GGGTAAAGAC TTTGCTAGTG G   51

(2) INFORMATION FOR SEQ ID NO: 2436:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 140 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2436:

AAAnTTAATT TTTGGGGGGC CCTTTTTTAA CCGGAAAATC CAATCGGGGC TTTTAAGGAA   60

TGGTTTTGGT TAACAGGCTT TGGAATTTGG TTTGGCAAAA CAATCCTTGG TTTGGGGTTT   120

CGGTCCGGAG GGTCCTAATT   140

(2) INFORMATION FOR SEQ ID NO: 2437:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2437:

GAAGCGGAAC CACCGTTGTT TTTCTTTTCA GGTCCAATTG AATAAATGTT ATGAATAGAA   60

TGGATAAAAA TATAATTATT TAAGTGTTAA AGTAAACCAA ATCATGATTT AAGATTATAA   120

GAAAGAAAAA TTGACTAATG TTAAAACCAA CAATCATATG GGTTGTAACG TTTATACAAT   180

CATCGTAAAA CTCAATATGC TTAATTTATT CAAAATGTTC GTCAATAAGT ACAATGAAAA   240

GGAGATTGAT TTTTGAATAA AAAATATCTT ATGATTGTAA TTATAATTTT AATATGATTC   300

AAGATACGAT TTTGAGACCA TGTGAAGGGA TTAAATATAG   400

(2) INFORMATION FOR SEQ ID NO: 2438:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2438:

TCTGTTTTGA AAGTTGCAGT TTGGACAGCA CCCGATGATT AGGTGAGTCT TTTGGTTTA   59

(2) INFORMATION FOR SEQ ID NO: 2439:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    .(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2439:

TTGGTnAAAC CGTTACAGTT GCAAGTTTTG AAGTGAGTTA TTTTTTGGTT   50

(2) INFORMATION FOR SEQ ID NO: 2440:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2440:

ATTAAAAATA AATTAAAnGT TCCAGAACCA GTTAACCAGA ATATTTACGA   50

(2) INFORMATION FOR SEQ ID NO: 2441:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2441:

TGCTGTTTTG GCGGTTTTTC TCCGTTTGGT TGAGTATGTG GTGTACCTTT TGTC   54

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 56 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2442:

GTTGTTGGGT GTGTGGTTTT GGGTGTTGTG GGTTTGGGGT CTGGGTTCGT TGGTGG   56

(2) INFORMATION FOR SEQ ID NO: 2443:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 264 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2443:

GAGACAAACT AGTCGTCCAG AACGGAATTT AAGTAATCAT AATAATTACG GAAGTGCACT   60

TTTGTTTTTG ATTTATCATT GATGGAAATT AGAACAATTT ATCGAATGAT ATTAAAATTA   120

CATAACATCA TGTTGAATGT GAAATTAGGA TTGAACATTA CCTGTnTATT TGAAAAACCT   180

TCAGTTTTTA AATCACTAGT ATCACAAATA AAGCGACTTA AATTCGATTC GTTAATAATA   240

GATAATGCAA ATTTAnGTAG CCCT   264

(2) INFORMATION FOR SEQ ID NO: 2444:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 67 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2444:

CCGTCTTTAG TACGTACGTT GTTTGCGGGG CTTGGGGTGC TTTCTGGGTG TTGGTCATTG   60

TATTGGG   67

(2) INFORMATION FOR SEQ ID NO: 2445:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2445:

AGCTGCATTT CTCGTGCAGG CTATCAGCAT CGATATCTGT ACCATTTAGT GATCATGC   58

(2) INFORMATION FOR SEQ ID NO: 2446:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2446:

AACCAAAACA AACATTTGTT CGTTAAAATA TTGACACAGA ACATAAGTTC TGA   53

(2) INFORMATION FOR SEQ ID NO: 2447:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2447:

CACAAATTAC ACCCATTGTT AnTACTAATA CTTnCCTnTT CATTTGTTTA   50

(2) INFORMATION FOR SEQ ID NO: 2448:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 75 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2448:

GCACAAACCA AACGCACCTT AACTGCTTTA AATGGCTGGA CGGGGGGTCA ACTGGCCTTA   60

ATGACACTTG AATCG   75

(2) INFORMATION FOR SEQ ID NO: 2449:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

GCAGCCTTCA AGTGTTTGCT ATTTGCTTTG GTGTCACAAG CCATTATCTA CGGTCCCGCA   60

ATTTAGCCCG C   71

(2) INFORMATION FOR SEQ ID NO: 2450:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 351 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2450:

TGGCGTGAGG AAAAATATCA TGTATTGTTA CACAGTCAAC AGTCTTACCA AATGATAAGG   60

AATGCTTTAA AAACGGATTT ATCACTTCAT CAAGTTCAAC AAATGATTGA TGTTGCTTTG   120

TTAATTGAAC CGGGTATAGG AAGTGTATGT AATGCTTTTG ATCATATGTG GGGATATTTA   180

AAAAAATGTG CGAATGAAGA AGGAAAGACA ACAATCAAAA CTACTTAAAA GCTGATTTTA   240

TTTAATGGnA AAAATCGACA CCCCAACTTT ATTAGATTTT TTAGCAGAAC TTGCCTAATA   300

AATATGGAnG TCAATATTTA CTACAAAGCC GnGTTTTTAA ACCCCAAAAA G   351

(2) INFORMATION FOR SEQ ID NO: 2451:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 54 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2451:

GTGTACCGCC TCGGCTGGCG TTCGCGGTGG GTGGTGCGGT CGGTGCGTGT CTGG   54

(2) INFORMATION FOR SEQ ID NO: 2452:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2452:

TGCCATTCCA ATGTTACCAT CGTCTTGGTA CTACTATATA CTGCGGCTAT   50

(2) INFORMATION FOR SEQ ID NO: 2453:

        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2453:

AGACGTGTTT CCACGGTATG GGATAAATGA AGCACCGACT GATAAATCAA TATAGCCTCG   60

TGTTTTTAGT TTACCCGAAC TATCCCTTGA TAATGATTGT GACATCTGCG GATAATATTT   120

CATTTTCTTA GATATCGTCG AAATATCACC GATTACTTGA AGTCCATCTG TCGTAAACAA   180

TTCAATTCTG CTTTGTTTGT TTTTACTTGG GGCGTATGTC ACTTCGGCAA TATATCGTCT   240

AACTTCAGGT GTCATTTCAG ATAACGCCTT AATCATATCA TCTTCTTTTG TACCTTTGAA   300

ACCATCCATG ACAGGTGCAT CATTAATTTT GACATCATTT GAACCTTTAA GCAATTTACC   360

ATTTTCTAAT AAAGGTAAAT ATTTACCTTT ATATTTCACT   400

    (2) INFORMATION FOR SEQ ID NO: 2454:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 156 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2454:

AGAAAGAAAT ACCATTTGGA GATAGAGACT CGTGTTATTT CTTAGCGATG GGAGATTTTT   60

ATAATAAAGA AGATAGnAAG AAAATTATCA AAGGTTATGA AAATAATTAT GGTAGAGGTA   120

TTAATATTCC TCGAGCACAT AGTATATATT TATATG   156

    (2) INFORMATION FOR SEQ ID NO: 2455:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 77 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2455:

ACTTAGGTGA TATGAAATGT GGTCCGCGAC GATCGTCAGT AACAAAATAA CAGGCAGTCA   60

TTGGATTATG TTTAACG   77

    (2) INFORMATION FOR SEQ ID NO: 2456:

             (A) LENGTH: 65 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2456:

AGTGAAATCG CTAAAGAAAA AGATGGAACC TCGGTATCTA ATACACAACT TCTTGAACGT   60

TTTTA   65

    (2) INFORMATION FOR SEQ ID NO: 2457:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 54 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2457:

TATCAATAAT TGCCACTTGC AATGACTGAT TAATTTGAGG TGCACATAAG CCAG   54

    (2) INFORMATION FOR SEQ ID NO: 2458:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 166 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2458:

AATTTTATTT CGAGATTCTT CAATATAGAT GTTTCTTCAT TAATTTGATT CTCTAACTCT   60

TGCTTACTAC CTAATAGTTT ATCTAATTCA GCTTTAGCTT TTTCATTTTC TTTAATTATA   120

TTAATTTCAT TATTTATGTT CGTnATCGTA TTATTTAGTT CGATAA   166

    (2) INFORMATION FOR SEQ ID NO: 2459:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 66 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2459:

CCAATGATTA AGCAATACAA TCGTCACTAA AATTACACCG ATAATCTGAA TCATCGTCAT   60

(2) INFORMATION FOR SEQ ID NO: 2460:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 103 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2460:

AAATCAAAAA AATGTATAAT GAAAAGAAAA AGAAATTTGG AAAAAATTGG GAAGACGCTC   60

AAAAAGCTGG AAAAGCTGTA GGTGAAGATT TGAGTGTnAA TGG   103

(2) INFORMATION FOR SEQ ID NO: 2461:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2461:

TTTATATCAG AATAGAATAG TAAACTAAGG CATTTGGAGA ACTTATTCCA TG   52

(2) INFORMATION FOR SEQ ID NO: 2462:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 113 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2462:

CAGCAGCGAA TTTTTGACGT CCAGTGTAGA ATGGATGTGA ATCAGATGAA ATATCTAAAC   60

GAATAACTGG GTATTCTTTT CCATCTTCCC ACTCCATCAT TTCTGAAGAn GTT   113

(2) INFORMATION FOR SEQ ID NO: 2463:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 255 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2463:

CTAACATAAT TGTTAACACT AAAATATTTA CTACTTTTAG AACTGTGCGA TTAAATACAA   120

TTGTCAGTAT TGTTATGACT AGGCTAACGA TACATAAAAT AAAGAAACCG TTAAAGACTA   180

AAATTAAGCG ATCGATTCCT TGTTGTAAAT CATTGATATT ACCCAAATTA ATAnTTAATT   240

GGATGCATTT nCCAA   255

(2) INFORMATION FOR SEQ ID NO: 2464:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2464:

TATGCGACAA TTCGAAACAT TTTATATGCA AAAGGTTATA CAACAGAGAA TGTTGATT   58

(2) INFORMATION FOR SEQ ID NO: 2465:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 65 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2465:

TGAATTTCAT TACCACATAT CGGACATTGA TCTCCAATAT TTACAGCAGA TTTAATTTCA   60

CTTAT   65

(2) INFORMATION FOR SEQ ID NO: 2466:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2466:

CGTGACCTTC AAAGACCGAA CGAGAGAGTT GAAGAGCATT TGCGAAGGCC A   51

(2) INFORMATION FOR SEQ ID NO: 2467:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2467:

AGTTTGTTAA GTTTTAGTTT ACTAACTTTT CCATTAGATA TTATTAATGA AAAAC   55

(2) INFORMATION FOR SEQ ID NO: 2468:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 76 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2468:

TTGTTGGTAA GGCACTTCTT AAATATCAAC AACGCGATGA TATTTTCATT GGTACAAAAG   60

TAGGCAATCG TTTAAC   76

(2) INFORMATION FOR SEQ ID NO: 2469:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2469:

CTTCTATAAT AAAACCATCT GCAATTAAGT CTTCAATAGA CGATGGATTT CTATTATGTA   60

TCAATGCATA C   71

(2) INFORMATION FOR SEQ ID NO: 2470:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2470:

CTTCGTCATT GTATTCGAGC GCCTGTATAG CTTGCTCAAA TGATGCATAA AT   52

(2) INFORMATION FOR SEQ ID NO: 2471:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 108 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2471:

AGAGGTTATG TTGATGTGCT TTATTTTCAT CAATGTCATT AACACAATCA TATTTCTTCT   60

GTTAATGCAC TGTATTATAT TCAAACGCGC TATCGACAAT TAATTTGn   108

(2) INFORMATION FOR SEQ ID NO: 2472:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2472:

GTCCCCAGTT GATATAGGAT CACAGTTTAA TATACTTGGT GAGATAGTAA TACTATTATT   60

AATTCAAATA GGTGGTCTGG GTATCGTGAC CGTAACCCTA TTGACACTAG TATTTTTAAA   120

TAGAAAGATA TCAATGAAAA ATAGATTCTT GATTATGGTT ACATGGAATA TTGACGAACC   180

TGGTGGTGTT ATTAAGCTAA TTAAACACTT GGCTATTTAT AGTTTAGTCA CTGAATTAAT   240

TGGTATGATT TGTTTGTGTT TATCTTTTAT ACCAAAATTT GGTATAGGCA AAGGTTTATT   300

TTTAAGCTTA TTCACATCAG TATCAGCTTT TAATAATGCT GGGATTTGCC CTTTTTAAGA   360

ATAACTTAAT AGATTATTCT AGTGATCCAA TTGTCATTAT   400

(2) INFORMATION FOR SEQ ID NO: 2473:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 147 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2473:

CTTCAAATAC TAAATCAGCG TTGCTAAACA TACCGTATAC ATTTGATGGC GTTGATAACG   60

CGTCCTGCGC TTCTGTTAAT AACTTTTCAG TTTCAGCATC TAAnATATGA GGACGTTTTT   120

CATTAATCAA CTTCAAATCA AATGCGA   147

(2) INFORMATION FOR SEQ ID NO: 2474:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2474:

CTTTAGGTGC TTGTGGTAAT TCTAATTCAC AAGATCAAGG TAACAAAACT GAACAAAAAA   60

CA   62

(2) INFORMATION FOR SEQ ID NO: 2475:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2475:

CCTTTAAAAT CATCTAGAAT ATCTCTTGAG AAAAATTCGA AATCTACAGT   50

(2) INFORMATION FOR SEQ ID NO: 2476:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 113 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2476:

ATAGTGGTTA GTCAATGTAA TTAAATGAGA ATAGAATGGT GATTTCATCT TAGCTTGATA   60

ATTAGCAGAA TCTTTAAAGA AAATTTTGTC TTnCAAGCCT AAGTTTACAA CGT   113

(2) INFORMATION FOR SEQ ID NO: 2477:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2477:

CGTAACTAAC TCAATTTACT GAAAAAATCG CTTGCGATGC AATAGCATTT G   51

(2) INFORMATION FOR SEQ ID NO: 2478:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2478:

TAGTTGCCGC TACGTTTATA CTCGTATTAA TGAAAAAAAC TAGCAAAGAA TCTAAAAAAG   60

(2) INFORMATION FOR SEQ ID NO: 2479:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2479:

TCGGACATGA TGGTAAAACC GTATTGGGTA TTCGCACTGA CACCTTAAGG GA   52

(2) INFORMATION FOR SEQ ID NO: 2480:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 133 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2480:

TTCCTAATTA AGGATTAAAA AGGGTTTCCT AATTAGATTA nAATTCCGGG ACCTGGATGG   60

AAAAAAGTTT TTAACTTTTC CATCTGGTCC CGTTTTTTGA TTTTCGATAT AAAAAAAGCG   120

CAATTATCTC TAT   133

(2) INFORMATION FOR SEQ ID NO: 2481:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2481:

AAATGTTTTG GAAGAACGTA AGAnAAATCA ATCTGAAACA AATGCACGAT ATGAAGAAGA   60

ACAAGAAAAT TTAATGGAGC TTTTAGAAAA TATATCAAAT GAGATTTCTG AAGCTCAAGA   120

TACTTATAAG TCTCTGAAAA GTAAACAAAA AGAACTCAAT GCTGTCATTC GTGAACTTGA   180

AGAACAACTA TATGTTTCAG ACGAAGCACA TGATGAAAAA TTGGAAGAAA TTAAAAACGA   240

TACTATAGAA GAGAATGAGG CTAAAAAATC CAGACAGGTT CTCGTTAGTT GGAGTTTTGA   360

GCCATTGAAA GTATTCnGGG GGCCAATTAA AACCGCCAAA   400

(2) INFORMATION FOR SEQ ID NO: 2482:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 68 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2482:

AAGGTGCATA GTCAACAACA TTTACAGCAT CATTTGATTC TGAACTAACC GAAACATTAT   60

ACTTACCG   68

(2) INFORMATION FOR SEQ ID NO: 2483:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2483:

ATGAGCCnAC ACAGTGGTGA GGTAATCAAC GGTACAGTGG TTAGTGTGAT   50

(2) INFORMATION FOR SEQ ID NO: 2484:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 213 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2484:

CGGAACTCGT CGAATAACTT TTTAGATTCT TCGTTAGCTT TTACATTAGC GAATGCTTCT   60

nTGATTGCTT TGTATTCTTC GCTTTCTCTT AAAGCTTGTT CTAATTGATT TGCATAATCA   120

TATAAATTTA CTGCCATGGT TATAGCACTC CTTGGTnGTG ATGTTTATTA AAACGTTCGA   180

TATTACTTTA CCACATCTCG CTTTTTTAGA CAA   213

(2) INFORMATION FOR SEQ ID NO: 2485:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 376 base pairs

        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2485:

GACCAAAATT ATCTTTAGCA CTTATAGGTA TCTTTTTAAT ACTTTGTGAG TTTTTCTATG   60

GCATTCCTTT TTTAGGTGCA ACGTTTATTT TAAGTTTTGG ATGGCAGCCT TTACTCTTTA   120

ATGCATTACT TTATCTAATT CTTACTATTA TATTATTAGT GAATAGACAA AATGCGATTA   180

GACCTATAGC GATTATTCCA ATATTTGGTA TAGTAGGTAG TTTTTTAGCT ATTATCCCCT   240

TCTTAGGAAT TTTGATTCAT TGGATTTTAT TTTTCCTAAT GATTCCAnTT GTCCTAGTTG   300

GATTATCAGC GCCAACCTAT ATACCCAATA AAAATGCTCG TGnCnTTTTA CACACAATAC   360

AAAGATGGAC CTAGAG   376

    (2) INFORMATION FOR SEQ ID NO: 2486:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 51 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2486:

TTGACCTTGA CGGAAACTTT TTTCCAAGTT CTAAAAGTGG GCCAAAATCT T   51

    (2) INFORMATION FOR SEQ ID NO: 2487:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 103 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2487:

GAATTTTGGC ATACACATAC ACTTTAAAAG ATATTATTGA AATTACAGGT GTAACTAAAA   60

GAACTTTACA TTATTACGAT GAAATAGGAT TATTAGTTCC AGn   103

    (2) INFORMATION FOR SEQ ID NO: 2488:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 106 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2488:

AATTACATTA GCACCAATCC ACACATCATT TTTAATTGTT GTACGGCTAG GTTGGTCATT   60

AAAGTCTATA AACGTTTnCT TTAAGTTAAA TGGATTATTA TTTAGA   106

(2) INFORMATION FOR SEQ ID NO: 2489:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 61 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2489:

TGAATTTGCT TGAGTCGTGC TGCTGATAAC AATAAAATTG CACATGGATA AAGAATGACG   60

C   61

(2) INFORMATION FOR SEQ ID NO: 2490:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 400 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2490:

GCTCGTATGA TACAAATTCA TAATCTGAAA CTTCTGTCGT TTGTCGAACA TGTGGTAACC   60

AATTCTTCAA GATGCTGTAT ATTTCTGCGT AATTTTCGTC ATTCCTGAAT AACCTCAACT   120

TTAAAATGTC ACCTTGTTTG ATATAACGCA TTAAAAAATA TTGATCTATA TCTCCCTTAT   180

CTTTAAGATG TTTTACAAAT GGATACAAAT TGTCGATGAT AAATGTATCT TGCGATGGCT   240

TATCGATATG AATATGTAAT GCAAACCAGT CTTTGTCATA TTCAATATCT GTATTTTTAT   300

ATTTTGGAAT TTCGATTTCG GGTCCTCGAT AAGATGATTT TTTATAAATT GGTGTAACAA   360

TTTCATACAC ATGATCATTC TTTGATTGAG GGAAAAATGA   400

(2) INFORMATION FOR SEQ ID NO: 2491:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 57 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

GACTGTTTTA TCGCAACTAT TTACACCTAT ATTATCGTTA GTAGGACATC TCGTCGG   57

(2) INFORMATION FOR SEQ ID NO: 2492:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 53 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2492:

CATTGAACTT GCTTTTGACG TACACCAGTA ATCAATGCCA TAATACGATC CGG   53

(2) INFORMATION FOR SEQ ID NO: 2493:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2493:

AATACAACTA ACATACACTT ACCCATGTCC GAAGTCCnTG TTGAGGAATG   50

(2) INFORMATION FOR SEQ ID NO: 2494:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 65 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2494:

GCTGTTTAGC TTGCTCAAAT GATGCATAAA TATCTGATGC AACTATCATA TCAGCTAGTT   60

CATCA   65

(2) INFORMATION FOR SEQ ID NO: 2495:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 322 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2495:

2254

ATTAAGCTTT CTAAATCATT GATGTTAGGA GCTAATGTGC TCGATAAGCA GAGTAAAGAA   120

GAATTGCTTA AACAAGCTAA ACATATAACA GGTTTAGAAA ATCCTAATAG TCCTACACAG   180

TTATnGGCTT GGTTAAAGGA TGAACAAGGA TTAGATATAC CTAATTTACA AAAGAAAACG   240

GTTCAGGAGT ACTTAAAAGA AGCAACAGGA AAAGCTAnAA AAATGCTAGA AATTAGATnG   300

CAAATGTCTA AAACCAGTGT GA   322

(2) INFORMATION FOR SEQ ID NO: 2496:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2496:

ATCAGTGTTA ATTCGCACGG AATTTCCTTC CATTAAACTA ATCCGATCAT ATAATGGAT   59

(2) INFORMATION FOR SEQ ID NO: 2497:

    .(i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 126 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2497:

CTAATTAAGC CAAAAGGGGA AGGGTCCACC AACCCTTGGT TTCCCCCCAT TGCCCGGAAA   60

CCACCAGnAA GTTTAAAGCT TCCCTTTAAG CCGTCCGATG GGTAGTCCGA ACTTTACCGT   120

TCCCGC   126

(2) INFORMATION FOR SEQ ID NO: 2498:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2498:

CACTTTGCGC CAGTTTTCAG TTGAGTGGCA TAGAGTCTGC TCATCAGTTC CTTGCTCC   58

(2) INFORMATION FOR SEQ ID NO: 2499:

(A) LENGTH: 90 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2499:

TCATGATGCA GACGCAACAG CATTTGGTTA TGAATATGGA CAAATACCAC AGATGCCGGT   60

AGCATTTCAA TCAAGTAAAC CTTTAATAGA   90

(2) INFORMATION FOR SEQ ID NO: 2500:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 292 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2500:

TGCTCAAAGT CGTGTAGACA GCCAACTAAT GCATTTTCAA GATCAGTGAC ATCTCCGACA   60

CCAAAGAAAT CACCGAATAT TTTTGCATGT TCGATTTTAC CTCGTTTAAC ATCAAACTTA   120

ATTTGTACAA ATCCTTTTTC AAATTTTTCC TCGCGTTCAA AGTTATATTT AGGGTTTCTA   180

CCATAATTCC ATTCCCAAGT TCTATATTTG TCGTTACTTA ACTTTTCAAT ATTnTCCCAA   240

TCTTCATCCG TTAATTGATA TTCTTCnACT TCAGTTTCGC CAAAGATAGT TT   292

(2) INFORMATION FOR SEQ ID NO: 2501:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2501:

GGTGTGTGTA GAGGTCGAGA GTTGGGGGGG GAGTAACGTG GAAGTTGCCC GGACAGCA   58

(2) INFORMATION FOR SEQ ID NO: 2502:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

ATACGGGAGG TATCAGCACG TACGTGCAGT CGGTAATGGA TCnAAATACG   50

(2) INFORMATION FOR SEQ ID NO: 2503:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2503:

ATCCCCACTC TTTTTTAAAT GATTTAACCA TATTTTATTT TTAAAATAAA TATCCATCAA   60

AGTGTATCAA TAAATTTATC ACATGTCAGA AAGTATGCTT CATCTGAATA CACCAATACT   120

CTCATGAAAC TTATTAAAAA TTACTCTCTC AACGTAAAAn ACCATTCAAA TTCATGAATG   180

GTTTGGAAGA ATGATTCATT GTTACGCTAT TTAATCACTA CATCTTAATT ATTGTTGCTC   240

TAAACGATTA CGCTTACCAT TTAAGAAAGC ATAAACGAGA CCTACAAAAA TACCGCCACC   300

GACAAAGTTA CCTAAGAAAG CAAAAACGAT ATTTTTTAAA ACGTGTAACC ATGAAACTGC   360

ATCAAGGGTA AAGAATACCA TACCTGCATA TAGACCTGCA   400

(2) INFORMATION FOR SEQ ID NO: 2504:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 355 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2504:

ATTATCTATG AATAAAATTT ATAATAAACA TATATTGAGA AATTCTCTAA TACCTATTAT   60

TACATTTTTA GGTGCTGATA TTGTAAGTAT TTTAGGTGGA GCCGTGATTA CGGAGACTAT   120

CTTTTCATAT AACGGTATCG GTAAATTATT TTTAGAATCG GTAATAGGCC AAGACTATCC   180

ATTAATGATG GCATTAACGT TATTTTTCTC ATTTTTAGGT TTACTGGGTA ATTTGATTTC   240

TGATATTACT TATGGATTTA TAGATCCAAG AATTAGAAGT AACTAGGGGG GATTAGAATG   300

CAAAATAAGT CAAAATCGCC TTTnAAAATT GCATTTTCTA AATTnATTCA TAnTA   355

(2) INFORMATION FOR SEQ ID NO: 2505:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 254 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2505:

CCGTTAGTTC CATACCATAT TTTTTTCTAT AAAATAATTT AACATCTAAT TGCCTTTCTA   60

ATTTTTCAAT AGGGGTAGAT ACAGTTGACT GTGAATAGTT AAGTAACTCT GATGCTTTAG   120

TAAGGTTCTT TGTTTCACTA GTTACTAAAA ATGATTTTAA AATGTTTAAG TTCAAAGTAG   180

TACCTCCTTT AGGGTTCCCT TTTATCGAAT CCTGAATTCT AAGAATTCTG ATTTAATAAT   240

AATATATnAn ATAT   254

(2) INFORMATION FOR SEQ ID NO: 2506:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 268 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2506:

AACTCCACCG TGTAGTTGCG CTTCATCGCC TTGAGGATGC GATTGGCGCC GTGCTGCGCG   60

GCACGTGCAG ATAGTGCGAG CACTTGGGCA GATCGCGCAC CGCCTCCAGC AGGTCGTCGG   120

TCATATCCTT GGGATAGTTC GTTACGAnTT GGATCCGGTC GATGCCGTCG ACATCCGAGA   180

TGCGGCACAG CAGGTCGGAC AGTCGCGTTG nCCGCTGGCA GTGTCGTAGT GGTAATGTTT   240

CACGGTTTTG ACCTAGCAGC GTTCACCT   268

(2) INFORMATION FOR SEQ ID NO: 2507:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 66 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2507:

AAAAGTGGCT AATATCATCA GCAGAATGTA TAACATAATC GAATTGCAAC CAGCGATTAT   60

ACCTTT   66

(2) INFORMATION FOR SEQ ID NO: 2508:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 53 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2508:

ACCTCCGCTT CAAATGTCAT TGATAGACAT TTAAAGCGGA GGCATGTACA TGT   53

(2) INFORMATION FOR SEQ ID NO: 2509:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 50 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2509:

ACCCTATGAn AGATGAAGTn ATTAACCAAA AACCACGTGT TGTAATATTA   50

(2) INFORMATION FOR SEQ ID NO: 2510:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 57 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2510:

TTAACCTATT ATATTAATTT TAGTATCAAT TCTTTCTCCA GTTCCTGCGT CATTTTT   57

(2) INFORMATION FOR SEQ ID NO: 2511:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 51 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2511:

ACGTGTTCAT AACCCATAAA GGCGAATATG GTAACACCGA ACATCATGAC A   51

(2) INFORMATION FOR SEQ ID NO: 2512:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 101 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

GTAnAGCGGT CCGCGCTTAA AGCGCTTGCT AACTTCGAAC AATGAATCTG CGGAACATCT   60

TGCGAATCCA CGAGATGATC TCATATGACG GGCAGCGAGG T   101

(2) INFORMATION FOR SEQ ID NO: 2513:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 67 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2513:

GGGTAATGTA ATAGTATTCA TCTACATCAT CTTGATCATC GTAATGCTGA TTGTACCCTT   60

CTAAATC   67

(2) INFORMATION FOR SEQ ID NO: 2514:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2514:

CCCGTCGTTT TCGTGnTTTT CGCGGCGTGT CTCCTGTTCG CGCCTCTACT   50

(2) INFORMATION FOR SEQ ID NO: 2515:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 275 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2515:

AAGAAAATAT CTCTTGAATA CTGATCGATT GCCATCGAAA AACACTGTTA AATCAAGTTG   60

CCCAGTCCAT TGTTGTTCAT CCATTATGAT AATCCTTTGA GTAAAGTGTC GCGTTCAATC   120

CAATCGATAA CTTCATCCAA ACCTTCGTCG GTTTTTAAGT TAGTAAAAGT AAATGGACGT   180

TTACCACGAA ATACTTTAGT ATCTTCAGCC ATTTGTTCTA ATGATGCACC TACATAnGGA   240

GCTAAATCAG TnTTGTTAAT TACAAAGACA ATCTG   275

(2) INFORMATION FOR SEQ ID NO: 2516:

```
            (A)  LENGTH: 59 base pairs
            (B)  TYPE: nucleic acid
            (C)  STRANDEDNESS: double
            (D)  TOPOLOGY: linear
```

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2516:

CTGCACCACC AATAACGTAA ATACTGTATA TACTAGTAAT CGCTAATACA CCGATATTA   59

    (2) INFORMATION FOR SEQ ID NO: 2517:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 119 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2517:

TCTGCTACTA CGTATACGAT AGAATGGATT TCTTTTTGAA CCTAAACGTG TTAAACGAAT   60

TTTAACTGCC ATTTATAAAA TCTCCTTTAA GTCATGTTTT AATTTTTATT TTCTACAnG   119

    (2) INFORMATION FOR SEQ ID NO: 2518:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 60 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2518:

ATTTCCTTTT AAGTTTTTAA AAATCCAAAA TCCTTGTGGT AGGGCCATGA AAGGGTTGGG   60

    (2) INFORMATION FOR SEQ ID NO: 2519:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 294 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2519:

ATAGAAGTGA AGCACGTAGA TTGAAACGAT GGTTAAATAA CGAGAGACAT TTAGAAAACA   60

ATAAAAATGA GGAATAATCA ATGATACATG GAATTGGTGT AGATTTAATC GAAATCGATC   120

GAATACAAGC GTTATATAGT AAGCAACCAA AATTGGTTGA GCGGATTTTA ACTAAAAATG   180
```

GGTTTGCTAC AAAAGAAGCG TCAGTAAAGC ATTAGGCCCC GGCCTnnGGA AACA 294

(2) INFORMATION FOR SEQ ID NO: 2520:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 145 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2520:

TTTTAGGCCG AAGAnGTAGT AATTTCCGGT CCTTTAAGGG GCGGGTGGTT AACCATGGCA 60

ATTAATCCCA GGGATGACCT TACCTAATAA CCACCTAATA ATTACCCGGA CCAAAGGTGG 120

AAATAATCCC TCCGGTCCTT CCCGG 145

(2) INFORMATION FOR SEQ ID NO: 2521:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 169 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2521:

TTTTAGTCAC CAAAATTCTC GCATTTAACT GATACGAATG TGCAATAACT AAAAATCGAT 60

CTAATAATTG CGTTGAAAAA TTTGGCTCGA CAGCACTCAT TACAATTACn AGTGTATCTA 120

TATTACTTAC AGGTGGTCTT TTCAACTCAT TTTCCCGCTC AAACACTTG 169

(2) INFORMATION FOR SEQ ID NO: 2522:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 88 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2522:

ATCCAGCCTT TCAACAAATA AATCTGAAAT TCGATGTTCT AAAATTTCTG CTTCTTGATG 60

TACTTCTTCC CAATTATATT TCAATATT 88

(2) INFORMATION FOR SEQ ID NO: 2523:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 228 base pairs

        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2523:

CAGTAACATC AATCTGTCCT GTAAGCTTGT GGTACTCCGA TACAACCATA AGTCAACGCA        60

CCACCAAAAA CGCCTTGGAG CCGTTCTACT TATTAGTCCA AGTTTAGACA TTGAAATACC       120

AACAACTTTG CAnTCCATAG TATCTGAAAA TGTAGACATT GCCTGCAATA AATTTAACnC       180

ATCATTTTTA TTATGTGGCA TTACTGCTAA TTTAACGTAT TCTGGGTT                    228

    (2) INFORMATION FOR SEQ ID NO: 2524:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 119 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2524:

CTCATCCATA GCGCTGGTAT TAGTATAGGT GTCAAACCAT TAGCGTATAT CATATCTTCT        60

GGATGTnCTC ACATATTCAT AGATGCACAT TTTACTTCTC TCGTACCTTA GTACTGGGA       119

    (2) INFORMATION FOR SEQ ID NO: 2525:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 357 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2525:

TACCAATATT AAATTTGAAC ATTATAGTTT GACCATCATA ATCTATCTTC TCTATTTCAT        60

TATAACTAAT ACTTCTATAA TAAAATTGGC CATTCATATC TACATTCATA ATTAATCTTT       120

CATTTGTTGC TATAAATGCC CCTTCAAATT CATTCTCACC TTGAACTTGA TACTCAATTA       180

TTCCTAGCAC TGACGGACCC TTTTTTTCAG TTGGAAATAA ATCATTTGGA TTCACATTAT       240

CTAAAATCAT AATATCCCTC CCACTTAAAA CTATAAACTA TTCTTCATAG GTATATGAAA       300

TACAAGTGAT TAACTATTnA TnATnAAGCT TAACTTGTAT TCCCTTTTCA AGATAAT        357

    (2) INFORMATION FOR SEQ ID NO: 2526:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 261 base pairs

2263

```
        (C)  STRANDEDNESS: double
        (D)  TOPOLOGY: linear
```

5

```
        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2526:
```

CACGCGTCCG GCCACCTGGA CATGGCCGAC CTAGAAGCCA AGCTGCAnGA GGCCCAGAAG   60

10

CATCGGCTGC GCCTGGGTGG CCACTGATGG GGCCTTTTCC ATGGATGGCG ACATCGCACC   120

CCTGCAGGAG ATCTGCTGCC TCGCCTCTAG ATATGGTGCC CTGGTCTTCA TGGATGAATG   180

CCATGCCACT GGCTTCCTGG GGCCCACAGn ACGGGGCACA GATGAGCTGC TGGGTGTGAT   240

15

GGACCAGGTC ACCATCATCA A   261

```
    (2)  INFORMATION FOR SEQ ID NO: 2527:
```

20

```
        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 108 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear
```

25

```
        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2527:
```

CTnTAGAGGA TATGAGTTCC TCATCATAAG AATTTCTGGA TCCTTAATAG ATCTCTTGCT   60

30

ATATATAATG TAATAGAAAC ATCTTTTAAG GATCCAGAAA TTCTTAGA   108

```
    (2)  INFORMATION FOR SEQ ID NO: 2528:
```

```
        (i)  SEQUENCE CHARACTERISTICS:
```
35
```
             (A)  LENGTH: 109 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear
```

40

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        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2528:
```

TTTTAAAATA CTTGGTAGAA GTTGGAATGG ATTAATCATT AATTATCTCT CAAGATGTAA   60

45

TGACTGTTCA GCACACTTTT CCGATATGAA AAGAGATTTG AAnACAATA   109

```
    (2)  INFORMATION FOR SEQ ID NO: 2529:
```

```
        (i)  SEQUENCE CHARACTERISTICS:
```
50
```
             (A)  LENGTH: 150 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear
```

55

GATTAAATTT GTTATACCTG GCTTGTTGTC ACGATCAAAT TTAATAATAC CATCTGAATC   60

AGTTACTGCG CTTTTAATTT TTTTAGCTGC AACATTCGGC TCGTCTAATA ATGAAATnGA   120

GTTTTTAGCA TTATCATCAC TCTTACTCAT   150

(2) INFORMATION FOR SEQ ID NO: 2530:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 127 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2530:

TTCTTTTTGG CCAGTGGCAG GAAGTACGGT CTTATTTGGT GTTATGTTAA GAAGGTATTC   60

CCATTTATTT ATCGTTAAAT ATGnATATAG TATAGTAATT TTAATTTGTT GCATCATAAT   120

ACTAGGT   127

(2) INFORMATION FOR SEQ ID NO: 2531:

    ·(i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 122 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2531:

CACATAATGA TTCGAATTAT TGTTTTAATT AAACCTTTTT CACATATGTA TAAATTTTAn   60

AGAGCGCATG CGTGAATATT TTCATTTGAT TCAAAGGCAA AAGATAGCCT TATACTCTTT   120

TC   122

(2) INFORMATION FOR SEQ ID NO: 2532:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 126 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2532:

AAATAATAGA GCAATTGGCA CATGTAAGAA TGCAAATTGA CTATGGCATC CAGTATTTTG   60

GTCACAAATG GGTTGTATAT GAGCATGTTG AAAAATAAGT CTTATGnTAA ACACTTAGTA   120

(2) INFORMATION FOR SEQ ID NO: 2533:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 101 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2533:

GAGAGCGGCC GCGTGTAAGG AGAGCGGCGT TCGTTCGCGT GACGCGAGTG TGGTTCGCGA   60

GAAGnGGACC AGAGTTCCCG ATCGAGGCTG TTCGGGTAAA T   101

(2) INFORMATION FOR SEQ ID NO: 2534:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 112 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2534:

TTGCTCATTA AAGATTATCC CAATCAATAT CATCTATATT TGTTGTACCA CTATTATCTT   60

TTTCTCTTTC TCTTACTTTG TnCATTGTAC CAGTAGATTC AAGATATATT GT   112

(2) INFORMATION FOR SEQ ID NO: 2535:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2535:

ATAACGAATC CAAAAATATA GAGAATGACA GTGAAACTTA AATAGGACTC T   51

(2) INFORMATION FOR SEQ ID NO: 2536:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2536:

(2) INFORMATION FOR SEQ ID NO: 2537:

         (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 158 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2537:

GGATGTACCA CCAGCATAAT AAACAACTTC AAATGGATTG ATAAAGAAGA nACCAGCAGA   60

GATAGGTAAT TCATTACCAT GTTCTTCTTG TAGACGTTTA CCTTCTTCAA TCTTTTGCTC   120

ATTTGCATCA AGTTGTTGTT GTAAGTTATC TCGCTTGT   158

(2) INFORMATION FOR SEQ ID NO: 2538:

         (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 50 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2538:

TATATTCATT AAATCCACAA AGCGGTCCCG TATAAACATG GGTTTCCATT   50

(2) INFORMATION FOR SEQ ID NO: 2539:

         (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 103 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2539:

AAAGTATACA TATCACTCAA CTAATCAATA ATCATACTTA CCTTCAACAA ATTCTTTAAC   60

ATGCAGTGTT ATCCCTTGAT AATATGGATA TTTnGTTAAT CTA   103

(2) INFORMATION FOR SEQ ID NO: 2540:

         (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 56 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

CAATCAATTT GTCTATCTGT TGAGTGGCAA CCTCTAATAA GCCTTTTATA TTGTCA   56

(2) INFORMATION FOR SEQ ID NO: 2541:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 126 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2541:

TGGAAATAAC GAAAGTATTA TTAATTTAAA GCATCTTTCT CCCAATACTT TAATGAGTGA   60

TATTGTTTAT ATACCGTATA AAACACCTAT TTTnGAGGAA GCAGAGCGCA AGGGAAACCA   120

                                                                          126
TATTTA

(2) INFORMATION FOR SEQ ID NO: 2542:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 201 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2542:

ATCAGTTTCT TCAAAAATAA CTGAAGTATC TGATGCTGAA AATTGGAATA GTTGATGGGT   60

CGGGnTATTG ATTTTTATCT GATGTAAAAA TCCATAAGTG CCATAAGATG TATATAGTTT   120

CTTCATATGA AAGGTCCCCC TTATGTnTTT ATTTATTATA CGATGATAAA CTAGTCATTA   180

                                                                          201
CCACTATTAA TAATTGATTA A

(2) INFORMATION FOR SEQ ID NO: 2543:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 65 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2543:

GAACTTTATT ACAGGAATAG ATAAGCACAG TCGTGTTACA CAGACGCTAA ATGCGCGTTC   60

                                                                          65
GTATG

(2) INFORMATION FOR SEQ ID NO: 2544:

          (A) LENGTH: 102 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2544:

AGCTATTAAT GGCGCTATAA TTGATACAAT AGTTATGATT AATAAAAAAA TAACCGATAA   60

CATTGCAATT TTATnATGAA TAAATTTAGG AAATGCAATT TT   102

(2) INFORMATION FOR SEQ ID NO: 2545:

        (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 50 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2545:

AATCTACATC CAGCATGATC nACATCAnAG CnGGATTCAC CCTTACTTCA   50

(2) INFORMATION FOR SEQ ID NO: 2546:

        (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 100 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2546:

AACCATTCAA CACACGACAC TAAAGTGCAG TACAATCCTA CAAAACGATT GTTTTTATCG   60

GGTGGTCTAA CCATTGAATA AATAATGAAT AATGGTAAnA   100

(2) INFORMATION FOR SEQ ID NO: 2547:

        (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 156 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2547:

ATTGAAAATC TTTTATCATT TCATACGTGT GCATAATTAA AAAGGTGAAA CCTCTTATTT   60

TGAGATTTCA CCTTTTTTAT TGTTAATTTA AATTTAATTT TAATGATTAT TTTGTTTCAC   120

(2) INFORMATION FOR SEQ ID NO: 2548:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 142 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2548:

AAAGTGAAAA TTGGAGGTGT AATTTTGACT AGAACTTATA ATATTATTGG TATCCTTTCT   60

TGTCTTATAT CTTTTATTAT TATGGCGTTA CCAATnATTT GGTACACAGC TTCAGCATTA   120

TGGTTCTTCC CAGGTGCAAT CA   142

(2) INFORMATION FOR SEQ ID NO: 2549:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 101 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2549:

CCCAACCCTA CnAACGACAT TACACAATCA GTAACAGATC GGTATTAAGA CTGGATATCG   60

TGGCATCTGT TGAGTTAATA TCAACAGTCG TCCAGAACTC G   101

(2) INFORMATION FOR SEQ ID NO: 2550:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 72 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2550:

TGTAACCATG ATTTAGATGA CTAAACGTGC TTGCCAACAT GCTTCATCCA ATGCCGAATC   60

CTTTAGCTAC AT   72

(2) INFORMATION FOR SEQ ID NO: 2551:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 303 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2551:

CAGTAAGAGG ACAAGGCTAT AAGGTGGAGA ATCATGTTTA AAACACTCTA TGCTAGAATT   60

GCGATTTATT CCATTACGGT TATTTTATTT AGTGCATTAA TAAGTTTTGT ATTAACAAAT   120

GTTTACTATC ATTATAATTT AAAAGCATCT AATGACGCGA AAATCATGAA GACGCTTAAA   180

GAAGCAAGAC AATATGAACA ATCAGCTAAA CCAACGCACA TTCAACAATA TTTCCAnACA   240

TTTAGGGTCA AATGGAATTA CCAAATAATG ACCATGGATC CATAAAGGTC nTnAGACCTT   300

TTT   303

(2) INFORMATION FOR SEQ ID NO: 2552:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 150 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2552:

TTTACTTTAG CCTTTATTGC ATTTGTAATT TATAGAACTG CGAACAGGTG ACTACTGTnA   60

ATTTATGTGA TTAAAGTTTC AATGATATTT GATTTATTAG ACCATTGCAA AAGCGCAAGG   120

TTCTCATGTG CTGCTACAGT TTGCGGTCTT   150

(2) INFORMATION FOR SEQ ID NO: 2553:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2553:

GCACTCGTCA ATAAAGATGA AGCAGCATTT AATCAATATA CGGCAGAATA CAAAAATT   58

(2) INFORMATION FOR SEQ ID NO: 2554:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 118 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2554:

AAAATCGTTG AATAATCAAT CATAGCAGTA AGCTATGTnA TATATTTTTA AAAATTGA   118

(2) INFORMATION FOR SEQ ID NO: 2555:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 102 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2555:

ACAACTTCAA AGAAATCATG TCACAAAAAA AGTATTTGAT TTTAATCATA nGTGGCGACA   60

ATCCGCATAC CAAAGCACAA CCTTTAGTCA ACCAATTCAG AT   102

(2) INFORMATION FOR SEQ ID NO: 2556:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 242 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2556:

AGATGCATTA GCAGCATTAG ACGTTAAACC AGTTGGTATT GCTGATGATG GTAAGAAAAA   60

ACGTATCATT AAACCAGTTA GAGAAAAAAT TGGGGATTAT ACTTCTGTAG GTACACGTAA   120

ACAGCCAAAC TTAGAAGAAA TTAGTAAATT AAAACCGGAT TTAATTATCG CTGATAGCAG   180

TAGACATAnA GGTATTAATA AAGAATTAAn CAAAATTGCA CCAACATTAT CATTAAAGAG   240

TT   242

(2) INFORMATION FOR SEQ ID NO: 2557:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 248 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2557:

TGCACTCATA ATCATCGGAA TATGTATAGA ATCAACTATC ACTTTGCCGT GTTTATCTGT   60

GTTAAATGTG TAACCATAAC AGTGTGTCCC ATTTGGATTA TGAATCTCAG AATAATCATC   120

AAAAATATCC TGAATTTnCA AATTAATTTC ATTATAGCGG nAGCAATGTC TATAAAATTT   180

TATTTCAA   248

(2) INFORMATION FOR SEQ ID NO: 2558:

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    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

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    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2558:

TTTGGGTCGT GATTGAAAAA ATCTAAGGCT AATAAACCAT GTTGTTCTGC GCTTAATAAT   60

15

TGTTTGAGTA TACGGTTAAT AATTAACTCT GTATCATGAG GGTTGACGCG AAAGTCAGAG   120

CGCATATAAG TCATATAATT CTCGAAGATT TCTCTATCAG TATTGCTTAA TCTTAATGAT   180

20

TTAACATTAT TTTCTTTTGT TAATTGCGCA GTACTTTTCA TTGTTACTTA AGCGCTCCTT   240

TAAAAATGTT TAATTCCAAA TTAAAATGGA AATGATTTTA TAGTATTAAT AAGGTCAATC   300

ATATCATATT AAACGCATAA ATATAACGAT TAATATTGGA GAGGAAAATG AGGACACTTA   360

25

ATAAAGATGA ACATAATTAT ATCAAGCAAA TAGCTAATAT   400

(2) INFORMATION FOR SEQ ID NO: 2559:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 333 base pairs

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        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

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    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2559:

AAGGGAAATT TAAAAGTATC ATTTGATTAT ATAGATTGGA TTAAATTAGG TTTTGGCCCA   60

TCAGGAAAGG AAAACTACTA TATGTACAAA AAATTTGGTA TTTTACCAGA TATGGAATAT   120

40

GAAATGGAAG AAAATTCGAGC AGTAGAGAAG TATGTTAAAG AGCAAGAGTA GCAGACATGT   180

TATAAAAGAC TGTGCAAAAT CACCCTCGTT TTACATTTGA TTCAAAGAAG AAGGTAAAAG   240

ATAAGAnTAT TTGCAACTTA AAAAGTCAAT nAGCTTATCG GTATCCATAC ATCATGGATA   300

45

AATGAGTnCA ACTAATTAAC AAATCACGAT ATA   333

(2) INFORMATION FOR SEQ ID NO: 2560:

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    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 87 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2560:

GTAAGACATT CACATTTATC ATTTCACCAC AATGGGTTTA CCAACCATGG TTTAACGAAT   60

CCAAAACTTT GATGCTCGTA TGTCTCA   87

(2) INFORMATION FOR SEQ ID NO: 2561:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 117 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2561:

TTGCATTTTG ACGTAAATGA TTAAACAAAT CGTGATTATC TCTTAATTTT CTAACCGCCT   60

TTTCAATTTC TAACGGCGTA ACTTCCTTTA GAACAATGCC AAATTTATAT TTnTCAT   117

(2) INFORMATION FOR SEQ ID NO: 2562:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2562:

AAGTCAAACA AAATAAGCAA ACAGACTGGT CAGAAGATAA GTTGAATAAT ATAGCTTTGA   60

(2) INFORMATION FOR SEQ ID NO: 2563:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 80 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2563:

AAGTGTTATT ATTGTGATCA TAAAGTGAAG TATTACCTTT TTTATTCGTA ACCCGATTCC   60

ATGCGCCTTC AACATAAACT   80

(2) INFORMATION FOR SEQ ID NO: 2564:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs

        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2564:

AGACATGGGC TTATCAGATA AAGTAAAAGC ATTACCTAAA GGGGGAGGCG GTAAGTCATT   60

ACCG   64

    (2) INFORMATION FOR SEQ ID NO: 2565:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 66 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2565:

GTTTGTTTAT AGTACCCTGG ATTTTCTTTA TTTCCATCAT GTGAAACTGT GTCAGTGAAC   60

GCTGAT   66

    (2) INFORMATION FOR SEQ ID NO: 2566:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 75 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2566:

TTAATTATTT GTGACGTATT ACACGCATTA CTTTAGAAAG TGATTCCCAA AGCGAATTAT   60

CTTTACGATA AACTA   75

    (2) INFORMATION FOR SEQ ID NO: 2567:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2567:

ATATTATTAT ATTGCTTTTT TTCAGTTTGC CGTTGTTACT TTCATAACTT   50

    (2) INFORMATION FOR SEQ ID NO: 2568:

    (A) LENGTH: 223 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2568:

TTTTAGGATT TGTAGTAGGT GAGCGACGTA TTnnGGATGC AATCCAGAGA ACAATAAATA   60

TTGAGAGAGA GCAATTCATA ACGCAGTTGA AATACATGTG TTACGAATTG CTTTTATGTT   120

AGTTTTTATC ACACAAGTTT TTTGATGCAA CCCCGTGATA GCGAAACTCA TATGTAGATA   180

ATACAGCTTT TTCAGCATCA TCTACATGAA TTCCAAAACA TCA   223

    (2) INFORMATION FOR SEQ ID NO: 2569:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 58 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2569:

AATAATGCCA TACAGTGAAG ACCATGCGCA TCAATCGATG TCTAGTGTGT ACTACGTC   58

    (2) INFORMATION FOR SEQ ID NO: 2570:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 250 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2570:

CGTTTCATTA GTTTTAAATG ATCCCCAATA CTTTTTGTAC CTTCACCAAC TATCGTTCCA   60

ACACTATCTA CAGCTTTTTC TGTGGTATTT TTAAACAGCG TCTATTTAAT GTCTTATCCA   120

ATTAGTTTTA TCTCTTAATC CAAATTTATT AGTATGAAAA GTCCAATTTT TAAGAATTGT   180

CTAAACAGAT TCCGCAACAA AACCAGCTAn AAACCGTCCA TACTATTGGA ATnAAAACGC   240

CAATGTTATA   250

    (2) INFORMATION FOR SEQ ID NO: 2571:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 174 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2571:

```
AGCTCCTTTC TTTCTAGTTA ATATCATTnA ATCTTGTTTT TCAGTGTCAA AATTACCTGT        60

AAAAACAACA TTTTTATCTT TTAAAATAGG GATTACACTT TCCACTTCTA TTTTATTAAT        120

CTCAGATATT TTCATATGAA TTTTTTGAAA TCCTGAATCG AAAAGTTTAG TTGG            174
```

(2) INFORMATION FOR SEQ ID NO: 2572:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 390 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2572:

```
CATGCGGTAG GTATTTCTAA TCTATGGACA AATGGCGGAT TTATGCCAAA TGGTATTGTT        60

GGTTTCTTCT TTGCATTATC AATTGTAATT GGTTCATACC AAGGTGTGGA ACTGATAGGT        120

ATTACGGCAG GTGAAACTAA AGATCCTCAG AAAAATATCG TTAAAGCAGT GAATGGTGTT        180

ATCTGGAGAA TTTTAATTTT CTATTTAGGC GCTATTTTTG TTATTGTTTC AGTGTATCCT        240

TGGAATCAAT TAGGAGACAT TGGAAGTCCG TTTGTTGCAA CATTTGCTAA AATCGGTATT        300

ACATTTGCAG CTGGATTAAT TAACTTTGTT GTAnTAACTG CAGCAATGTC AGGATGnAAC        360

TCAGGGnATT TGCAGTGCGA GTCGTAATGA                                      390
```

(2) INFORMATION FOR SEQ ID NO: 2573:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2573:

```
TAGAGTACAG AACATACGCA AGGAACTCGG AGTTTACTCA CGGGACTTnT               50
```

(2) INFORMATION FOR SEQ ID NO: 2574:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2574:

TACAATTACA AACGCATCGT GAGATGTTTT AAGCATCAAT GAGAATCTAA CTCTCCAAG   59

(2) INFORMATION FOR SEQ ID NO: 2575:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2575:

GACACAACGT ATGACGCATG AAGAGTTGCG TGTTGACAAT CAAGATGATC ATAGCCAAGT   60

TAGTCTAAAT GGTTACACAA AGGGGTCTGA GAAAGATCAA GAAGCATTCA CTAATAATAA   120

GGATGAGGAA GCAGTTGCTG CTAAAAATCC TGAATCAGAA GAATATAAAG TGAATGAAAA   180

AATAAAAAAA GAACATAAAA ACTTTATTTT TGGTGAAGGT GTTTCAnGCG GTAAAATATT   240

AGCGGCATTA TTATTCGGTA TGTTTATTGC GATTTTAAAC CAAACATTAT TAAATGTTGn   300

TTTACCAAAA ATTAATACGG AATTTAATAT TTCTGCGTCA AnAGGGCAAG GTTGATGACG   360

GGATTCATGT TAGTAAACGG TATTTTAATA CCAATTACGG   400

(2) INFORMATION FOR SEQ ID NO: 2576:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 122 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2576:

TTTAAATCGT ACCTTAAATT TGAAAGTAAT AAGACACACC AATTACCTTC TAACTCTATC   60

GATAGTTTCA AACAAGAAAT CGnTAGTACA TTCAGTTATT TAGAACGCGT TGATTACCAG   120

CT   122

(2) INFORMATION FOR SEQ ID NO: 2577:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

CACATTGAGG TGCAGTCATA CCTTGTTTAA ATGTCCAAGC ACGTACTTCT T   51

(2) INFORMATION FOR SEQ ID NO: 2578:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 400 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2578:

AATTATGACT ACAGGTCTGA CTCCCCCTTG TTCAGATCCC TGTACTGGTG ATAAATCTGC   60

TAAATAAACA TCTCCTCGTC TAATCATTCA TTCGTTGAAT TAGAAGATAA ATATGTTTCG   120

TTGCAATCGC ATGCTTCACA CTCTATCGGA AAAGCTTCGT TCGCTAGGGA GAGATTTAAA   180

TCAGCCATTT GTGAATATCC TTCTTTTAAA GATTGTTCTA AGCTATGACT TCTATTTTGA   240

CTAAAAGATA ACATATGAGA ACCTCCAATT GATTCCAAAA GTTATTAAAT GACCTTTAAT   300

TACTCTAATG ATAACAAATT TTATATGCAC TGACCATATT ATTTTAACAA TTCATTTGTT   360

ACAAAACGGT GGATCACCCA TCATGGATAG AGTCGCGGGn   400

(2) INFORMATION FOR SEQ ID NO: 2579:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 112 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2579:

ATAAAAACCT AATTGACTCA TAATCTTCTA ACGGTATATC ATCCACAATC ACAGTATGAT   60

TAGGATTATC GTTAGATACA TCTnTCACTG CCTTATCTAA CCCCTCATCA CC   112

(2) INFORMATION FOR SEQ ID NO: 2580:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 231 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2580:

CATGAnTnTA ACGGATTCAT TCCATATATC AATTGCGTTT GTTATTTTAA TAATGCTATT   60

ACTACAACTT CGATTTAAGC TATATTTATA AAAAAATGCG CCTACTCATA ACATTCTTTG   180

GCTATTTAAC TTTAATAAGC TAGGGCCAAG TTTGTCATAA GATAAGCGCA C   231

(2) INFORMATION FOR SEQ ID NO: 2581:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 60 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2581:

ACTTCGTAAA ATTTATCTTG AGTGGTTGTT TCTATATTAA GATTCATTTC ATTACACTCC   60

(2) INFORMATION FOR SEQ ID NO: 2582:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 284 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2582:

GTCAAATGCT GAGTTCTAAT AATGATGTTG GCCACCATGC ATACAAAAAT GCTAAAAGAG   60

AATTACGCAA GATTTTAGAT AGCTATCTCG AAAATGGTAA ATTAAAATAT TACGATATTA   120

TCGTTACAAG CAATTTAGCT ACTAAACATC CGTTTTTCGA GTATGCACGT TCATTTGATT   180

TTATCATTGT TTCAGATATC GGTTTAATAA ACGTTGATGT AAAAAGCTGG GGTGAAAAAA   240

CATTTTATCA CTTTGATGTA CCTGATGAGC ATGATACAGA nAnA   284

(2) INFORMATION FOR SEQ ID NO: 2583:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 56 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2583:

GAGTCAGTCG AAGTTTGTCG TTCGACCCGT AGAAGTGTAA AACGGCATTG TGAATG   56

(2) INFORMATION FOR SEQ ID NO: 2584:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 67 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2584:

TCGACTAATG TAATGTAGGC ATTGGACGTC AAATGTAATG TGGGGCAATC CGACGAGATG   60

ATGGTGC   67

10

(2) INFORMATION FOR SEQ ID NO: 2585:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 52 base pairs
          (B) TYPE: nucleic acid
15   (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

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      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2585:

CGTAACCGCC CCTTGTCCGG GCCCTCCAAG CCTTTTAAGG GGACCCCCCG GA   52

(2) INFORMATION FOR SEQ ID NO: 2586:

25

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 238 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear
30

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2586:

35 ATTAGCAACA ATGTCAGATA ATCGATACCA ACTAATTAGG CGAGAAGCGG TTTCTCATGG   60

TCTTAGTGGC CTAGAAATTG ATGTATTTGA TTTGCATTCA AATAAGTCTA GACATATTAG   120

CTCGTTATCA GGTGGAGAAA CTTTCCAATC GTCGCTTGCA nTAGCTTTAG GGTTAAGCGA   180

40 AATTGTACAG CAGCAATCAG GAGGTATTTC ACTAnAATCA ATATTTATTG ATGAAGGA   238

(2) INFORMATION FOR SEQ ID NO: 2587:

      (i) SEQUENCE CHARACTERISTICS:
45   (A) LENGTH: 50 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

50

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2587:

ACTGGAAAAA ACCGCnAACA CGACATTGTC AAAACGACGG CCAGTGCCAA   50

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(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 102 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2588:

10

GnGCAATTAT ACCACTATAT TTATTTCTTA TACTCCATTT GATTTATAGT TGTATTAATA   60

CATTGACTCA AAAACTAATT AATCAAATAT GTTTTTTAGA TT   102

(2) INFORMATION FOR SEQ ID NO: 2589:

15

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
20
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2589:

25

GCATAATATC GGATATGCGn GTGTGTCAGT CnCATAGTCG nTGGATTGCG   50

(2) INFORMATION FOR SEQ ID NO: 2590:

    (i) SEQUENCE CHARACTERISTICS:
30
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2590:

TTAnAAATTG CCTnTCCAAT TnTAAGAATC CTTTTTCCAA GGTAAAAAAA   50

40   (2) INFORMATION FOR SEQ ID NO: 2591:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 200 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
45
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2591:
50

CTTCATCCCT TACTTTTAAT TGTCACGTCA AATAATATTT GTCTTTAACT AGTAATAACT   60

CCAAATATAT TTAGTTTGTG GTGCTAGCTA TAAACACAAA TGAnTCATAA CACTATATTT   120

55

TGATTTTnAA TTATTTATAT   200

(2) INFORMATION FOR SEQ ID NO: 2592:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 74 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2592:

TGCATTAATC ATCTTGGATA CTCTTTCTAC CAAAGTAATG ATTGCACTAC CATGACGACG   60

ACCAGCAATA GTAT   74

(2) INFORMATION FOR SEQ ID NO: 2593:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 244 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2593:

CACCTGCTCA CCTCTATTTT CAAACAATTA TGATTGAATT GAATCATTCT AATTTTTGTA   60

AAGTTACTTG TTTAATTTAT TATATTTATT AACTCTATGA TAACAAAAAT ACTGTTTGTG   120

TATAACAATA AATTGAGATA CTCAATAATT TGATAATGTG AAATTGATAC TTTTCAAAAT   180

AGTTGAATAT GACAATTAAT GATTAGTTTT GCnATGGTGC TATAAnCAAT ATTTAGCAGT   240

TATC   244

(2) INFORMATION FOR SEQ ID NO: 2594:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 201 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2594:

ATATGGTATG GAACTAACGG AAGAAGGCTT AGCATACGTT AAATATGCTA AAGTGATTTT   60

AGATAGTAAT AGCGAATACG AGAGAGAnAT AAAAGGACTT TACAATAAGA AGGTAAATAT   120

AAGTATTAAC ATGCAAGAnA GTCAGTATTT GTATCGCTAC TATAATAAGA TTAGTGAATG   180

(2) INFORMATION FOR SEQ ID NO: 2595:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 156 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2595:

AAAAAGTATT AAAAATTGCA ATTCTTAAAC TGTTATTCAT ATTAATATTT CTAGCAAATA   60

ACATTGTAAA ATAAAGAAAA ATAATTAnAG TATTGCACTT TATTGAAATT TATATTACGA   120

TAGTAATGCA GAAATTTATA TATGCAAAAT ATTATA   156

(2) INFORMATION FOR SEQ ID NO: 2596:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2596:

TGATCCGCAA ATCGCTGAAC ACGTTCTTCT ATTGGAATCC CTCCATTCAC TTTTAGCTAG   60

AC   62

(2) INFORMATION FOR SEQ ID NO: 2597:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 140 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2597:

TTACCTTTAG nTTTTAAAAC CTGACCCTCC AACCAGCCTA ATTGGTTAAA TGGGGATCCA   60

TTTATATAAT CCCAGGCCTA ACCTTCCAAG GACCAACCTA AGGGATTAAT CCCCCCAATG   120

GCCAAAGTGG GATGGGTAAT   140

(2) INFORMATION FOR SEQ ID NO: 2598:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 112 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2598:

ATTAATTGGG GAGTTAAATT AAAAAAAAGG GGTTCCTTCC AACCGGAnCC ATTCCCATTT   60

TGGATTAAAA ATTCCCGCCT TTGAAAAAAT TGTTTGCCGA ACCGCCCTTA AG   112

(2) INFORMATION FOR SEQ ID NO: 2599:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 63 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2599:

ATACCGCCCC CAGTTCAATA AGAAGCCCTG GATCAGACCT GACCCTGGTA TGGGGGGAAT   60

CCC   63

(2) INFORMATION FOR SEQ ID NO: 2600:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2600:

ATACTATGGA ATGCCTTAAT GGTGGATAAT TTCACCAAAT TAATTTTAAA AAC   53

(2) INFORMATION FOR SEQ ID NO: 2601:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 73 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2601:

AACTAAAGGT TCTAAAGATA CAGTAAAAAT TGAAAATAAC TATAAAATGC GTGGCGAGAA   60

AAAAGATGGT AGT   73

(2) INFORMATION FOR SEQ ID NO: 2602:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 108 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2602:

CGGTTGCCAG CCAAAACTTG GCAnCCAAGG CAATTATAGC AAGGCACCCA CCTAAATTTG   60

CGGACCACCC GGAATGCGGC CACCAAAGTT GGTGGGAGGC CATTTTAA   108

(2) INFORMATION FOR SEQ ID NO: 2603:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2603:

AAGCTTATAA CTATTTGTGT TTGTGATCGA GATAGGTTTG CCTGTAAAAA TGGCCATCA   59

(2) INFORMATION FOR SEQ ID NO: 2604:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2604:

ACGTCCAAAG GGCCGTTCGC CCCAGAnGTG CTGGCAAGGT TCCACAACGn   50

(2) INFORMATION FOR SEQ ID NO: 2605:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 107 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2605:

GTCCAATGTC ACATTAATTG ATTGGTATAA GCGATCACAA GGnCATAGTG AATATTTTGC   60

ACCAGACGGT GTACATTTAG AGTACAAAGG AGTCCTAGCT TTAAAAG   107

(2) INFORMATION FOR SEQ ID NO: 2606:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs

          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2606:

GTTTAAAGCA ATTTGGAAGG ACATTGGTTA AAGGATGGGA GTGGCAAAAT CTGG   54

(2) INFORMATION FOR SEQ ID NO: 2607:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 366 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2607:

GTTTTAGCTG AAGTTAATGA TGAAGATATC GGAGCTATGG TAATTAAACT AGTTAAACTT   60

ATTTTCATGC TTGATTATGT TTTATTTCAT TCAATTCAAA AAAGCTATAC AACACATATG   120

AATGAGCTTA AAAATTGTTT CGATTACATA GCTGAATTAG ATAATCATTA TGCATTAGCA   180

ATGTATCGTA GAACGCTAGA ATGTTATACT GAACCACAAA TTGATGATTC AAATGATGGC   240

ATAGTATTCT CTGAGTTAAC ACATCCACTC ATAGCAGATG GCAGTAGCCA ATGATTTCnC   300

ACTATCACAn AATATACTGT TAACTGGGGT CGAATGCTTC GGGnTAAATC AACATTTTAT   360

GGAAAT   366

(2) INFORMATION FOR SEQ ID NO: 2608:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 142 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double
              (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2608:

TTCTTAGACG TCAGGTGGCA CTTTTCGGGG AAATGTGCGC GGAACCCCTA TTTGTTTATT   60

TTTCTAAATA CATTCAAATA TGTATCCGCT CATGAGACAA TAACCCTGTA TAAATGCTTC   120

AATAATATTn GAAAAAGGAA GA   142

(2) INFORMATION FOR SEQ ID NO: 2609:

          (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 50 base pairs
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2609:

GGGTCGTCAA TTGAnGGCAG GTAGAGCATT AAGTCAGAAT TGTAGTAAAT   50

(2) INFORMATION FOR SEQ ID NO: 2610:

 (i) SEQUENCE CHARACTERISTICS:
  (A) LENGTH: 51 base pairs
  (B) TYPE: nucleic acid
  (C) STRANDEDNESS: double
  (D) TOPOLOGY: linear

 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2610:

ATTGGGTGAT GAATTTTGAC GGTATTGTCA AGTCCAGTGG CTAACTTCCG G   51

(2) INFORMATION FOR SEQ ID NO: 2611:

 (i) SEQUENCE CHARACTERISTICS:
  (A) LENGTH: 93 base pairs
  (B) TYPE: nucleic acid
  (C) STRANDEDNESS: double
  (D) TOPOLOGY: linear

 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2611:

ACAAACTTCG GACTGCCAAT TACATTTACC TTGGGGGGTC AGAAACAATG GGTGCATAAA 60

GGCCCGTGTT TCGAAACGGG AAAAAGCCCA GCA   93

(2) INFORMATION FOR SEQ ID NO: 2612:

 (i) SEQUENCE CHARACTERISTICS:
  (A) LENGTH: 58 base pairs
  (B) TYPE: nucleic acid
  (C) STRANDEDNESS: double
  (D) TOPOLOGY: linear

 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2612:

ATGATGTTTT TCGGCTAATT TTTATACTGA ATTTAGTTTA ATTAACTTAT GATATTTT 58

(2) INFORMATION FOR SEQ ID NO: 2613:

 (i) SEQUENCE CHARACTERISTICS:
  (A) LENGTH: 102 base pairs
  (B) TYPE: nucleic acid
  (C) STRANDEDNESS: double
  (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2613:

TTCTCACCAT TAACTATGCA TACTCACTTT ACACATAAAT TTGCTTAACA TGCAGAACGG   60

AAATAAATCA TTACCACATA TAGATCCCAT CATATATTTA nA   102

(2) INFORMATION FOR SEQ ID NO: 2614:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2614:

TGAACTACAA GACGCTTATA TCATTGACGC ACATTCTCG CAGTGAAAGA AACACTTGCG   60

TA   62

(2) INFORMATION FOR SEQ ID NO: 2615:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 120 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2615:

TGGAGCATTT CACATACATT GGCAACCTCA TGGAGCTTAT CATTCTACCT TGGGGnACAG   60

ATATAACAAC ACTAACGCAA CATGGATGGT GTCGTTGATA ACTTTCAATC TATAGAATTA   120

(2) INFORMATION FOR SEQ ID NO: 2616:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2616:

CTGTAGTAAA TTGCCAGAAT CCGTATCAAT ACCAGTCTGT GACTGCGTTG GCC   53

(2) INFORMATION FOR SEQ ID NO: 2617:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 128 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2617:

ACATATGATA TGAGTATATT AACGTTTAAA TTATGGATAC TCTAAAGACA GGCGATTTTG   60

AnAAATCAGC AAAAAGTTAT ATGATGTAAG TGGGACAGAC ATACTAGATG TAACACATTA   120

ACCAAGTG   128

(2) INFORMATION FOR SEQ ID NO: 2618:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2618:

CCTAACCGTG TGTGTATGTA TACCTACAAA AAAATTTACA TTGTGACACT GCGTACGTG   59

(2) INFORMATION FOR SEQ ID NO: 2619:

    .(i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2619:

GCCCATGGTC AATCAGACAC ACGGATTGAA CGTTAACAAT TTATGACTTT AACA   54

(2) INFORMATION FOR SEQ ID NO: 2620:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2620:

ATCATTGTCA CATTGAGTAG CCGTAAAATG GTCAGACGAT CAATGCGAAC TGA   53

(2) INFORMATION FOR SEQ ID NO: 2621:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2621:

CTAAGTGTCG CCCGAATAAC CGTCAATCCA CGGAGCACAT AGGATCTCCC ATG   53

5   (2) INFORMATION FOR SEQ ID NO: 2622:

           (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 59 base pairs
                (B) TYPE: nucleic acid
10   (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

15   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2622:

TGGGACCGAT AATCATTCGC ATGAACACCT TCCACCGTCT CTTACTCACT ACCTACGGC   59

       (2) INFORMATION FOR SEQ ID NO: 2623:

20   (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 64 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

25

           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2623:

ATTAAATTGT TATTTCGTCA TTAGGTGACA ACTTGTATGT AGATATTTTA ACATATTTTA   60

30   TGCT   64

       (2) INFORMATION FOR SEQ ID NO: 2624:

           (i) SEQUENCE CHARACTERISTICS:
35   (A) LENGTH: 55 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

40

           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2624:

CCGTCCCAGA ATATCATATG ACAAATGTTA AGAGACTTGA ATGATCATAC ACGTG   55

45   (2) INFORMATION FOR SEQ ID NO: 2625:

           (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 66 base pairs
                (B) TYPE: nucleic acid
50   (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2625:

GTGGTCACCA GGTACGGGGG ATACAGGGGG TTAATCCCAC CTTGGATAAG TGGAAAACGG   60

ATTTCC   66

(2) INFORMATION FOR SEQ ID NO: 2626:

  (i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 62 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2626:

CCACCAATGG GTGGGGGATG GAATAACCCT TAATGCGGTG GTACCCGGGT AATGGTAGCC   60

CC   62

(2) INFORMATION FOR SEQ ID NO: 2627:

  (i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 54 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2627:

CATGTTTTTT CATTCCTTGA TGACGACACT AGAGGTTCCC GTGTTCATTA TTAA   54

(2) INFORMATION FOR SEQ ID NO: 2628:

  (i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 56 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2628:

TTGGCCAATG GGCGATACAC CCTCTCAATT CGATACATAA CTCAAGGCTC AGTCAT   56

(2) INFORMATION FOR SEQ ID NO: 2629:

  (i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 50 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2629:

TGTCGCTAGG TAACCGTGCA TCGTTCACAG GTACnTATGA TTTCACCnGA .   50

(2) INFORMATION FOR SEQ ID NO: 2630:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2630:

GAAGGnCCCA AACCAGGCGT TAAAGGCCGA TTGGGTTTAA ACCAAAGGTT   50

(2) INFORMATION FOR SEQ ID NO: 2631:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 65 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2631:

CGCGAGTGTA TCCGTCGATA TGTCGAGAGG AAAGATTGAA GTGTGGAAGA GTGTTGAGTA   60

ACCCT   60 65

(2) INFORMATION FOR SEQ ID NO: 2632:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2632:

TGAAAGAACT TTAGCTAGAC GTTCGTAAAG GTCTTTTGAC ATAAAGCTAG AGA   53

(2) INFORMATION FOR SEQ ID NO: 2633:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

AAAAGCCAAA AGGAATTAAT TAACCCCGGG GTTTAATTTC TAATGGGAAT TTG   53

(2) INFORMATION FOR SEQ ID NO: 2634:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 68 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2634:

GGTGTTCACA TTCTGAAGGT TTAGAGAGTT AAGATTATAT ATATATAAGT TTTGGGGTGA   60

TAGATATG   68

(2) INFORMATION FOR SEQ ID NO: 2635:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 80 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2635:

CCAATTTCAC TTGGTGCTGC CATTTCGGTC TCTCGTGTAC TTGTGATTGA GGTGCCATTG   60

TTCCCGTAGA TGGTTCACAT   80

(2) INFORMATION FOR SEQ ID NO: 2636:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 144 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2636:

CTTACACCCA ACTTATTGAC TTATAATCTA TTAAAGTGCC ATTTTACAAT CTGAATCCCT   60

TAATATAGCA ATAATTACAA CTTCCGACAA ATGACTTGTT TTATGTGCGT GATTCATCAA   120

TGAACATCGT AATGCGACnT AATA   144

(2) INFORMATION FOR SEQ ID NO: 2637:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 104 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2637:

TAATTCGGCA ACTAATATCA AGATCATGAT CAAATACTAC TGCCATTTTC TTATACCTCT   60

TAATGTGAAA TCACTGnCAA CACATAACAT CTTAAAACTT TGAC   104

(2) INFORMATION FOR SEQ ID NO: 2638:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 151 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2638:

CATTCATCCG TTTTTTTGGT TCATGTACAT ACCATTGTTT TGTACACAGC GAAGTCAGTT   60

AACCTTATAT CCTTGTATAA CAGTTGAAAT CGGCAATATT AAACAGTACT TTCCCAATTG   120

CTTTCTTCCT CAATTGTGCG ACGGACTGTA n   151

(2) INFORMATION FOR SEQ ID NO: 2639:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2639:

AAGATCAACT GAAATTCATG TGTTGCCCTT TATTAAGATC ACATGGAAAT A   51

(2) INFORMATION FOR SEQ ID NO: 2640:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2640:

TTAGCTAGTT GGTAGGACGG CTACCAGGCA CGTCATAGCG CCTGGAGGGG TC   52

(2) INFORMATION FOR SEQ ID NO: 2641:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs

        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2641:

CAGGCTTAAA CCTGAGTTAG TGCCATTCAT AATTGCAATC CCAAGCGACG GAA   53

(2) INFORMATION FOR SEQ ID NO: 2642:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 345 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2642:

ATGTTTGTCA TCTGGAGCnA TAGAACAGGG TTCATCATGA GTCATCAACT TACCTTCGCC   60

GACAGTGAAT TCAGCAGTAA GCGCCGTCAG ACCAGAAAAG AGATTTTCTT GTCCCGCATG   120

GAGCAGATTC TGCCATGGCA AAACATGGTG GAAGTCATCG AGCCGTTTTA CCCCAAGGCT   180

GGTAATGGCC GGCGACCTTA TCCGCTGGAA ACCATGnCTA CGCATTCACT GCATGCAGCA   240

TTGGTACAAC CTGAGCGATG GCGCGATGGA AGATGCTCTG TACGAAATCG CCTCCATGCG   300

TCTGTTTGCC CGGTTATCCC TGGATAAGCG CCTTGCCGGn CCGCA   345

(2) INFORMATION FOR SEQ ID NO: 2643:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 75 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2643:

CTTATACGGA TGTATAGGTC GGTCCAAACA TTTGATTTTA GTGGAGAGCA GCCTTTCACA   60

AATTATGTTC AATGT   75

(2) INFORMATION FOR SEQ ID NO: 2644:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 57 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

TACCGGTTAA TTAACCAGGG CCCCGGTAAA AAAATCCCCG GTATTCCCCA TTCCAAC   57

(2) INFORMATION FOR SEQ ID NO: 2645:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 66 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2645:

AAAGCAATTC GCCCGATAAG AGTAGAGACG AATTGCTTTT AAGGTTAAAA CAAAGTGAGT   60

TCAATT   66

(2) INFORMATION FOR SEQ ID NO: 2646:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 63 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2646:

CAGTATAACT TGTGACCTAT TTAGAGGGGC ACGGTTGGTA CAATGAGTCT GAAACCGTAT   60

CAA   63

(2) INFORMATION FOR SEQ ID NO: 2647:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 208 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2647:

TAGAACATGG ACCGGTATTT TACATCCTGT ACGCCTAATC TGTTGTAAGT ATCTTTAGTG   60

AACCGTTGCT CTGGAATAAC CGCGATTCTG GGCAAACAGT GTGTAAACCG ACTnTATGGG   120

GATGTGTGAG TAATCATTGT GnACTGTTGA TTCTGTTCTG GAATCCCATT TCACAACACG   180

ATCTTGGAAG TGCTGTCATT TTAGATGC   208

(2) INFORMATION FOR SEQ ID NO: 2648:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 150 base pairs

2297

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2648:

TTTTAACCTA AAGAATACTA ACACTAAAAG AGAATGATTC TGTACCGCTT TCCTTTTTCA   60

CTCAATAACT TTATATTTAG TTATCCTTAT AATTGTAATT TATGTTAGTT GGTAAATnTT   120

TACATATATG TATTTGATAT GCTTGTAAAT   150

(2) INFORMATION FOR SEQ ID NO: 2649:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 138 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2649:

AGTTTAACTG ACATCGAGTG GTACACAATA GCAATGGTTG TGTGTAAAGT CCTGGTGACA   60

ACATATGAGA GTAACATTTG TAGTGATTAT CTTGTACTGA GAGAATTGAC ATCTATGnAG   120

TTTATCACGT GCAAATAT   138

(2) INFORMATION FOR SEQ ID NO: 2650:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 52 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2650:

TCACAATTGC AAACTTCTGG CACGCACTCA TCTGCGATTT CACAAGCTAC AT   52

(2) INFORMATION FOR SEQ ID NO: 2651:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 65 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2651:

GAGTCAAATT AAAATGCCTA TTGGCCATTG TGATGTATAA TCACTTAGTT CACATATACT   60

(2) INFORMATION FOR SEQ ID NO: 2652:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 67 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2652:

GGGCGGTAAT TGTCACCATC ACAAATTGCT ACGTTGAAAC ATCGAGGATT CAAGCTGGAC   60

AGCAGAG   67

(2) INFORMATION FOR SEQ ID NO: 2653:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2653:

ACACATCTTA TATGTCTTAC TGATTTAAGG AAAGAATCAG TGGATCAAAC TG   52

(2) INFORMATION FOR SEQ ID NO: 2654:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 261 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2654:

CAAGCTGTAA ACCAAGAATT CCAGCATTAA ATATCTCTCn TGGTATCGGT TGAGATAAAT   60

ATTCCGTGTG CTCATTAAAT GTAGTAATCT TTATTGTAGT TCCTCAACCT ATGACACGAA   120

TATTGCACAA TATTAGTATA GACAAATATT TCCTTTATAA TCTCATTCAA TTTTCTCCTT   180

TAATTATGTA TCATACATTG TATATTCTCA TATAGACGTT TTGnCATATT CATAGCTTCA   240

ATATTAGTGC ATTTATGTAT T   261

(2) INFORMATION FOR SEQ ID NO: 2655:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2655:

AATCCTATTA GCACTTATAA TGATCATGAA AAGATGTCAT CGAGAATCAC CTAGTACACG   60

(2) INFORMATION FOR SEQ ID NO: 2656:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 75 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2656:

CGCCGAAAAC AATAAATTCT CGGAACATAG AATTTATCAC ATACCACGCT TGGATTATCA   60

CAATGGACTG AGTCG   75

(2) INFORMATION FOR SEQ ID NO: 2657:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 202 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2657:

TATTAAATAT GCGGTTGCAT ATATCTACGG CATGATTTAA CCGTGAACCA TGAATCATTT   60

TAATCGGGCA CGCGTAAAAT GCTCATTGAT CCGCAnATAC CACTATATAT CTAATAGCAA   120

GCGTCCAGGA TTCTGTGTTT TATAAATTTA AACTAACTGA AACGTGTGTA TCAGTTCACT   180

CCGnTCGATT ACCACACTTC AA   202

(2) INFORMATION FOR SEQ ID NO: 2658:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2658:

CGTACATGTG CATCATGTAT CTACGTCAAT AAGATGATGG GGTCACATGA TTGGACCATT   60

(2) INFORMATION FOR SEQ ID NO: 2659:

2300

```
(A) LENGTH: 207 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2659:

```
CTAATCATGT CATGTCTACA ATTATTTGGA GTATTGCTGA CGAAATGCGT TGTACAACTT     60

TTTCATTCTA GCACCTTGCG GGGGCCCACA AAnGAATTGG TCCATTCTCA nCATCAGTGG    120

GGGGCGCGAA TAATTTCGAA ATTATTCTGC CACTCCCACT TCATCGATTA AGTTGTAACT    180

CTACATTACA TTTGTCTTAA ACCATTG                                        207
```

(2) INFORMATION FOR SEQ ID NO: 2660:

```
(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 54 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2660:

```
TTAATTATGT ATAATACTTA ACAAGATCAC CTGATAGATG TCTAAATATT ATCT          54
```

(2) INFORMATION FOR SEQ ID NO: 2661:

```
(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 130 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2661:

```
ATTAAAAAAA AATGGGGTAA TTTCCGCCAA ATCCCGTTTC CCCCTTGCCA AGGCCAAATT     60

TAACCACCCT TGCCAAATnA TTAAGCCAAA TTTTCCGATA TTTGTTTCCG TAATGTTTCT    120

TTAATTAATA                                                          130
```

(2) INFORMATION FOR SEQ ID NO: 2662:

```
(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 104 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear
```

AAAGTAAAAC CAGTCTATTC AAAAAGGTGA AAAATGGTGA CGCAGCGTAA ATAAnTGGTC   60

TCTGGTAGGG TAAATCGCGT TGTGGGTTTG TCACATCAGG AACT   104

(2) INFORMATION FOR SEQ ID NO: 2663:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 115 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2663:

AAAAAGAATA AAAGGACTCG AAAAACTCAA AACTTATTnT AGATAGTCAT CGTGACAAGA   60

AACAAACATT TAACTAGACT AAGAAAAATG CTTCGATTAA AAGGCAGACT CATCA   115

(2) INFORMATION FOR SEQ ID NO: 2664:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 164 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2664:

GCATGCGCCA CGGTGTCTCA GCAGAGTGAC TGCCACCTTG TGTGCGCAGA GTCTGCGCCT   60

AGTACAGTCA GGGTGAAACA CnCTATACGC ATTAGGTACA GTACTTCCTG TCTCCGACTT   120

GAGTAGAACG TGACATATCT ATCAGCATTC ACTCGAAAAA GGGA   164

(2) INFORMATION FOR SEQ ID NO: 2665:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2665:

AATTACGCAA TnTCCCTGTC TTAnTGAAAG GAATTGACCT GTTAATTCGT   50

(2) INFORMATION FOR SEQ ID NO: 2666:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 64 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2666:

ACAATTCAAT AGAATTTACC CGTAACAGCG TTGCACTGCA CTCAAGACGG CTGACGTATA   60

GCAC   64

(2) INFORMATION FOR SEQ ID NO: 2667:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2667:

GTAGAACCAG CGACGGCGCG GCGGCTGAGC AACATCTGAC TACCTATCGG CCGCGC   56

(2) INFORMATION FOR SEQ ID NO: 2668:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2668:

GGATCGATTG ACTACATGAC GTGGnGACGC AATTATACGG ATAGTCCACT   50

(2) INFORMATION FOR SEQ ID NO: 2669:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2669:

GCAAGATCGA ATTACAATCA CGACGATCAA CGCACGTAAT CATCTCTGAT CACAGTAA   58

(2) INFORMATION FOR SEQ ID NO: 2670:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 124 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2670:

ATACCAGCCA GACTTCGATC AACAGTGTTC AACTGCATTG CCCAGTAAGT TGGATAGCTC   60

GCACATAGTG CTACAAGTTA ACATATACAn CGAGTTTGTA TCTCAAGCTT GAAGCTTGAC   120

TACC   124

(2) INFORMATION FOR SEQ ID NO: 2671:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 54 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2671:

CGCTTACTGC ATAAAAGCCC CTAACACCGG GGCACTACGC TCGTTCGCCG GCTT   54

(2) INFORMATION FOR SEQ ID NO: 2672:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 51 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2672:

TCAGCGATTT AACACTAATT CTTCTAGCTA TTCTCTGTAT TTGGACGACG A   51

(2) INFORMATION FOR SEQ ID NO: 2673:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 57 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2673:

GATAAGTTGT ACCATATTTC GATGCAATTC AATGGACAAT GAGGTCACCT GGCTTGT   57

(2) INFORMATION FOR SEQ ID NO: 2674:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 76 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2674:

TCCTTTGGCC AATTTTTCCA AGTTTTAACC CAAACGGCCC GGGTTGGGTC CCCAATTCCA   60

ATCCAAAATA ATTTTA   76

(2) INFORMATION FOR SEQ ID NO: 2675:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 56 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2675:

TCCGGGAACC TTACCCAGTG GCCCTACCCT ATGGGTTAAC CCAACCAGTG GGGCCA   56

(2) INFORMATION FOR SEQ ID NO: 2676:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 67 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2676:

TGCGGGGTCT CGTGCCGCCG TCTGCGGTGG TTGTTTGTCC GGTGGTGTGT CGGAGTCTTT   60

GCCAGCT   67

(2) INFORMATION FOR SEQ ID NO: 2677:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 55 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2677:

GGACAGAGGC CTTGACCCCC CCACAATCCT GATTCACCGT AAGTTGCTCT CCCCC   55

(2) INFORMATION FOR SEQ ID NO: 2678:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 65 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2678:

AAATTGGGGC TTCCATCCCC ATTCCAAATT ATTAAAACCG TTTAGGGGCC TTATTGGCAC   60

CATGG   65

(2) INFORMATION FOR SEQ ID NO: 2679:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 176 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2679:

ATTTTGGGAT TAAACCCTTA ATTAAAATTG GCCGGGAAAA GGAAAAGGCC GGTTGGGAAA   60

AGGCCAAGGA AAAGACCTTG GGAnACATTA AAAACCTTGG GCCAAGGCCT TCCAAAAACC   120

GGTTGGTTTT TATTTTGGGA ACCAAATTGG GGGGCCGGGA TTGGGCCAAA ACCTTG   176

(2) INFORMATION FOR SEQ ID NO: 2680:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2680:

GCCCCAAAGA ATTCAAATAA CCnTTCGGAC CCGGTAATGG CCACnTAATT   50

(2) INFORMATION FOR SEQ ID NO: 2681:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 63 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2681:

TGTGCATTTA TTGCATAACC TATATATGTG TGACCGATAT TTAGTGCGCA CTTCAATGGT   60

GCG   63

(2) INFORMATION FOR SEQ ID NO: 2682:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2682:

TTATCCAAGC TTCCGGATAG TTTCAAGAGA AACCAATGAA ATCCGTTATG GGACCAATGG   60

GT   62

(2) INFORMATION FOR SEQ ID NO: 2683:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 70 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2683:

AACAGCATTC AAGTGAGTTA CTGGGGTTTA TGCACCATCA TTGGATATCT GCACAAGGAA   60

TTTCAACGTG   70

(2) INFORMATION FOR SEQ ID NO: 2684:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 68 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2684:

CTTAAAATTC CCCAGTTTCC TTCCTTTTAA ACCCCATGGA ATTATCCCGG CCAAAAATGG   60

ACCATTAT   68

(2) INFORMATION FOR SEQ ID NO: 2685:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 58 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2685:

TTTTAACAAA ACACCTAGAT ATGTTCGCTG ATCAGAGATG CCTGGTGACC GGTGATCC   58

(2) INFORMATION FOR SEQ ID NO: 2686:

```
                (A) LENGTH: 87 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear
```

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2686:

ATCCATCCTT ATAGGCATTC ATCCTTTAAC ACCAACGATT TACATTATGG ATATAACGAC   60

TTGAGGGGGA ACGTGGGGTC CATCCTA   87

    (2) INFORMATION FOR SEQ ID NO: 2687:

        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 50 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2687:

ATGGCTGGGC GCTTTACGTG GCCACATTAG GATTATGGCA CTGAAGCGTA   50

    (2) INFORMATION FOR SEQ ID NO: 2688:

        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 50 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2688:

AACGGTCGTA GGCAAGGGAC TCCCCCCnGG nGCTAnATGA ACTGGTCGTA   50

    (2) INFORMATION FOR SEQ ID NO: 2689:

        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 60 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2689:

GCTAGCATCC ATGGCTCCTA TGCCGAAGCT GAGTAGACTT AGGTGACGGG TGCGTGACAA   60

    (2) INFORMATION FOR SEQ ID NO: 2690:

        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 146 base pairs
```

```
        (C)  STRANDEDNESS: double
        (D)  TOPOLOGY: linear


        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2690:

ACTTAAAAAA GGAAGATTAG AAAATTCATA AAAAAATTTT GCTGGGGATT CTTGATCCCA        60

TGGGCCCATn TCTGGATTTA GGTTATTGGG TTGGCCAGCC AGGTTAGCGG GGCCCCCATT        120

CTTCCAGGCT CGGTTTCTCC CAGGAC        146

        (2)  INFORMATION FOR SEQ ID NO: 2691:

            (i)  SEQUENCE CHARACTERISTICS:
                (A)  LENGTH: 53 base pairs
                (B)  TYPE: nucleic acid
                (C)  STRANDEDNESS: double
                (D)  TOPOLOGY: linear


        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2691:

ATTGGTGTCT AGATCATTTA ATACTAAACA TACAACACGA CTAATTCCAT TCA        53

        (2)  INFORMATION FOR SEQ ID NO: 2692:

            (i)  SEQUENCE CHARACTERISTICS:
                (A)  LENGTH: 113 base pairs
                (B)  TYPE: nucleic acid
                (C)  STRANDEDNESS: double
                (D)  TOPOLOGY: linear


        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2692:

TATTGAATTC AAACTATGTA CTATTTCCTA AATAATACAA TAAAAACGAC TACCATACTG        60

GCCAGAAATA TATTTTATTT GTTACACATT AATTTCAnTC CTCCATAATT TGC        113

        (2)  INFORMATION FOR SEQ ID NO: 2693:

            (i)  SEQUENCE CHARACTERISTICS:
                (A)  LENGTH: 54 base pairs
                (B)  TYPE: nucleic acid
                (C)  STRANDEDNESS: double
                (D)  TOPOLOGY: linear


        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2693:

GACTTATGTC CGTGTTCCGC TGAAGGCACG TCACGTAAAC TACCCGGTAC AGCT        54

        (2)  INFORMATION FOR SEQ ID NO: 2694:
```

```
                (A) LENGTH: 204 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2694:

```
CTTCAGCATG AAGAAGTCGC GTGATATACA TCATATCGAT ATATACCGAT TATATCATCA        60

GAACATTCTC CTGGTATCAT TAGATAGATG ATAATTTGAC ACAGTCCACA ATTTGTnACA       120

ACGCCGAGAC TCAATGGCAT CCTGTACnTG ATCTATGCCG GAAAACACTA GTCTATATGC       180

CCGCAGACGT CCACTATATG CATC                                              204
```

(2) INFORMATION FOR SEQ ID NO: 2695:

```
        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 112 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2695:

```
ATAACTCTAA TTTGAATTAT CTCTCACTAT TAAAACGCGA GCTGTGTAAT AACGAACGCT        60

GACATAATCT TGTATTGTCG CATCATTCGC TGGTATTATC ATAnTGCGGT TA              112
```

(2) INFORMATION FOR SEQ ID NO: 2696:

```
        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 148 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2696:

```
TGGCAAAATT AGATGTCTGA ATAGTTTTAT TTACAAGTAC AAACCTTGTA CCATTTTAAC        60

GTAAACACAA TTTACTTATT GAAAAGAAAA TAAATGTATT CATGAAnACA CACTTTCCAT       120

AGCACTCATC TATAGTACTC AAATTCAG                                         148
```

(2) INFORMATION FOR SEQ ID NO: 2697:

```
        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 101 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2697:

CCTATAATGC TAAACTTCAT ATATCTCTTT GGCAACTATC TCCCTTCTAT TACCAAAGTT   60

ACGATAGCAA nACAATAAAG CAAGCATGTC ATGCTTACTT C   101

(2) INFORMATION FOR SEQ ID NO: 2698:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 131 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2698:

TTGATAACAT TTGAAAAGCT GCTCCGATAT CAGCAACCAT TTCATCGACC ACAATATACG   60

ACATAGTCAC AAAACTGATT AGAAGACACC AATTGCTGAT TATCAAATCA CAAATTTAAG   120

nTGAGATTCA A   131

(2) INFORMATION FOR SEQ ID NO: 2699:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 202 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2699:

GATAGCGGTT GTTAATCAAA CGATGGTACA TGCTTACATG ATGCGCCATG TTTGATAACA   60

GCTCTCTATG ATTACGATGG AAGAATGGTT TATTTCATCT CAATTATTCC TATTAAATGn   120

AACATGCCCT AGCAAACGGA TACAACACAA TCACAACATC ACTTTGAAAT TGTTAAACCT   180

GAGAACCACA TACGCGnAAC AC   202

(2) INFORMATION FOR SEQ ID NO: 2700:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2700:

TTCGAATTTA ACAAACGTAT CACGCCATAA AGGTTGTATA TGTTGTTTGT AAATTC   56

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 163 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2701:

TATTGCGGGC TTATTAGTAC ACGATCTATA TGATGGTCAA ACTTATGTCT TTCATATTCA   60

AGTGTGACAT TGTGCGGTGA TTATATTTAC GCGTCGTTAT CTACGAACGC CACATTAAGA   120

TTCGAAACTG ACAATCAACT CATAACGCCA TGGTCCTAGA AAn   163

(2) INFORMATION FOR SEQ ID NO: 2702:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 120 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2702:

TAnACAATCG TAATCGAGTC AATGATGTGA ATTGCCCACG TGAGCGCTAA GAATGCGACA   60

TTCCACACGA TAAGGCAGTG CGCATGCGCA CTGACCTAAT AACACTGAGG ATGAGTACTA   120

(2) INFORMATION FOR SEQ ID NO: 2703:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 103 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2703:

CTGCTTGATT AGGATCGTAT TTATATGAAG ACTGTGTTCC ATAATGATGT GCGTTTTGGC   60

TGAAGTCCCT TAAATGTACn TGTGTATAAA TGCTATAATT TAG   103

(2) INFORMATION FOR SEQ ID NO: 2704:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 160 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

TCTATAACGC CTCTCATCGT TTGGTCACAT ATTACCATTA TTCATTTTAT GTTCTCGATA   60

ATTGTATGCG nTGTTTCTCA CTGTCATCAC ATTGATACAA CTCATTGTCA CTTTATACGA   120

TTCACACACC TCGATACGAG TGATGATATA TGACAAAGCT   160

(2) INFORMATION FOR SEQ ID NO: 2705:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 116 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2705:

TTATTGTTTA AGATGGTTAA ATGTCATCAT ATAACAnTTA ATTTTTAGCA ATTCGATATG   60

CCTATAACCT ATAAATTTCA CGTCAACAGA AAGTGACAGG CATACGGATG TGTGAA   116

(2) INFORMATION FOR SEQ ID NO: 2706:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 229 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2706:

TTACACCTGC AGTGTATGGA CTATGGCTAG ATACAATAAT TTTAGTCATC AAnCTACATC   60

ATACAAACTT ACGACTTACA CATATCTGCT TCTAnATCTT CTAACTGATT AAAGCTCGAC   120

ATCGGAAGCT ATTCTAAATT ATTATCATAT ATCTAACTAA CTGACCTAAT ATATACTACC   180

ATAAATAACC CGCCTCAAGG TTCGCATCCG CATATAATGC TTAGAAGTC   229

(2) INFORMATION FOR SEQ ID NO: 2707:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 122 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2707:

TCCATATCAA TCCTGAAAGT ACACATATAT CGTACACCAT ATGGTACAAT TTCCTATAnT   60

ACACATCACG CATCTTTCAA GACACATGTT AGGCGCTGGT CGGTGTATCT CAGAAATGCA   120

2313

(2) INFORMATION FOR SEQ ID NO: 2708:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 233 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2708:

GGAACTTTTC TGATTAAGTG TTCACACGCC AACCATAACA TGTATTCATG CACACAATTG   60

TTGCTAAnCT CACTAACAAC ATACGACCAT TTTACTTTCA ATACATATGA TCCGTATAAC   120

TCGAATTCnC TGCTTATAAA TGACCATTTT GACGTTCACA ATGTTAAACG ATTGGAAATT   180

TTAAAGTTAG CATGTCCACA TCCGAGCAGT AACTATGCCG TACCATTTGT ATA   233

(2) INFORMATION FOR SEQ ID NO: 2709:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2709:

TTGTACCTAC CAACGAGGAT ACAATGGATG TCACACGAAA ATTGGGATAT AGATGTCCCA   60

GT   62

(2) INFORMATION FOR SEQ ID NO: 2710:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 104 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2710:

CTTTAAAAAG GATAAATGAT TGAGAnAAAA ACCCATTCGA AAATCATGCT GCTCATGCTG   60

TAGACTTATC GTTTGGACAC TCGCGTAAGA GCGAGCAGTG AAAT   104

(2) INFORMATION FOR SEQ ID NO: 2711:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 141 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2711:

GTCCAGAATA TTAATCTGAC ACAACCATTT TAGCnGGTGG ATTAAATATA TACGACCTCA   60

CCGCAAGAAT CTCTATTTAA CTTAACCTAT CATGAATAAA CTGGCGCTTG TGATATCATA   120

TGAAGATTAG CGAAAGATAG C   141

(2) INFORMATION FOR SEQ ID NO: 2712:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 202 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2712:

TGGTATTGAA TAGCAAAATT TTGACACTAT TTGCATACTC AATGATACAT CATATCGTTA   60

TATGGATTTT TATGGTCATT AATGGTAAGA ATTTGATACG GAATATTGGC AGGTTTGGAA   120

ATCAAATAAT ATGAGAAATT GTATTAACnA TTAGTCAAGT TAACGCTCAT AAATAGACTC   180

ATCnCGCGCT ATAACGCTTA CC   202

(2) INFORMATION FOR SEQ ID NO: 2713:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2713:

TTGAACTGTC TAAGACTTGG ACGCTAAATG AATGCGTTGA TACAAACGGT GAATCC   56

(2) INFORMATION FOR SEQ ID NO: 2714:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 70 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2714:

CATGACCGAC ATCAGGTGCA AACTCCCTCA TTAATCTGGG AAAACTGTAT CCCGGTAGCT   60

(2) INFORMATION FOR SEQ ID NO: 2715:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 124 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2715:

CCTATAACTA CTCAATATTG CAATTACACA TCCTCACTTT TGTCAATTGT TTGACAATCn   60

AATACACGTT ATGCACAACT CCATTTTAAC GGAATGGAGA GCACATATGG ACAGTAAATT   120

AAAT   124

(2) INFORMATION FOR SEQ ID NO: 2716:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 217 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2716:

GGAATATGTA CTATTATCAT TTGATGTTAT TACTCATATT TTTTGTAATG AATGCTATCA   60

CCTACAAAAA ATTTACTTGA AACAGTAATA ATAATTAATT ACCACAAACC ATGATAAATT   120

TAATAnCTAA TCTAAAATAT CGCATGTTCA nAGCCACAAG ATATAACGCG TTCCGTAGAT   180

GGAACTAGAT AGTATAAGGC GCCGTGGAGC CTGGCCT   217

(2) INFORMATION FOR SEQ ID NO: 2717:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 72 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2717:

ATGACATACG CGCATATACA TGCTATCCCG AACTAATATT GATGCGTATT ATGTAATTGG   60

AGCGAACACT CA   72

(2) INFORMATION FOR SEQ ID NO: 2718:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 139 base pairs

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            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2718:

CATATCATCA CTATATCCAT TGCGTAATAG TGATGATATT GATTGGCATA ATGGTATATG   60

GCAGATACGA TAACATAACn AACACCTCGG ATAATTGCTA TTAGCTGCGA AGTTATCGTG   120

CCTGATTTAA CGATGTAGA   139

        (2) INFORMATION FOR SEQ ID NO: 2719:

            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 79 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2719:

CTCTATCATA TCTAGCCATA TGCATGAGAT TATCGTTTAT CTCGACACGC TCTTAAAAGG   60

CGACACCGGC ATATGATGT   79

        (2) INFORMATION FOR SEQ ID NO: 2720:

            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 53 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2720:

CAATCACAAT TGAAATTACA CAAATACAGC CCATTGCATG ACACAGACCA ATC   53

        (2) INFORMATION FOR SEQ ID NO: 2721:

            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 66 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2721:

CGCCCGAGGC TACCATTTTA CCATAAAGAC CGGTCTAAAT CCTTCCGGTT TCCATGGGCC   60

ATTTGG   66
```

2317

```
    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 169 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

```
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2722:
```

TnCCTCGCCG AAAATGACCC AGAGCGCTGC CGGCACCTGT CCTACGAGTT GCATGATAAA   60

GAAGACAGTC ATAAGTGCGG CGACGATATC ATGCCCCGCG CCCACCGGAA GGAGCTGACT   120

GGGTTGAAGG CTCTCAAGGG CATCGGTCGA CGCTCTCCCT TATGCGACT   169

```
(2) INFORMATION FOR SEQ ID NO: 2723:
```

```
    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

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    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2723:
```

CCGGGCCAAG CTGGTGATCA CCGATGTGGA GCGCCAACAT CGCATCGAGG AAAT   54

```
(2) INFORMATION FOR SEQ ID NO: 2724:
```

```
    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

```
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2724:
```

ATCGGTGATC ACCAGCTTGG CCCGGGACAA CTGCAGAGCG TGCAGCAGGA ATTC   54

```
(2) INFORMATION FOR SEQ ID NO: 2725:
```

```
    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 68 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

```
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2725:
```

AAAACCATTG TCCACCTTTA GAAAGCTTTT GTTTTGGGAA TACCTAAACC GTGGTTAATG   60

(2) INFORMATION FOR SEQ ID NO: 2726:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2726:

TTTAGGCCCT GTAACnGnTT GCCGnTTGGn CCGTGTGTAT ATCGGGGGAA   50

(2) INFORMATION FOR SEQ ID NO: 2727:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2727:

GGATCATTAA ACGTGTATCA CCATCCAGTT TGCAAGACGG ATAAACTGCT GCAACG   56

(2) INFORMATION FOR SEQ ID NO: 2728:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 70 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2728:

ACCCATGGAG AATTAAATTT AAAAACCGTA TTCCGGGTGG ATGCTGGGTG GGTAAGTTGG   60

CCATACTGGG   70

(2) INFORMATION FOR SEQ ID NO: 2729:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2729:

ACCACCTTCC CCAATAAGCT GGCCTAAAGC CCCATAATGG GCCATGGTGC GGCC   54

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 74 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2730:

TGTTTGGGGA CCTTAAATGG TTCCAAATTC CAACCACCCA CCAAAAGAAT TCCAGTTTCC   60

AATTAAGCCA GCCA   74

    (2) INFORMATION FOR SEQ ID NO: 2731:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 66 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2731:

AAGTTGGGGA TTAAGGCCAG TTATGGAAAG GATGGATGGT CCATTTGGGC TTATTAGAAG   60

AGCATT   66

    (2) INFORMATION FOR SEQ ID NO: 2732:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2732:

TTTGnAAAAG CCnGTAAGAG TATTTGATTT TGTTGGAGGC CAAACCAGAA   50

    (2) INFORMATION FOR SEQ ID NO: 2733:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 102 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2733:

AGTACCAGCG GACAATTCGG ACCCAACTTG GCAATTTGnG GTTTTGGACC AGGAAATAAA   60

(2) INFORMATION FOR SEQ ID NO: 2734:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 111 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2734:

CCAGGCTGGC AGTTTTTCTA AAATGGTGGT AGGAAAATTA nCCAAACCAT TTAGGATGGC   60

ATGGTCTTCC ACGGATGGCG GCCGTTAACC CCAAAAAAGG CCATTCCATT T   111

(2) INFORMATION FOR SEQ ID NO: 2735:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2735:

CGTATGGGAT GGCCATTCTG ATGACACACA ACGGTTAGGT TAGCAACGTT GTCAAA   56

(2) INFORMATION FOR SEQ ID NO: 2736:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2736:

CAATCCGGGT GTGCGGGCGT GTGTACAAGA CCCGGGACGA TTACCGACAT   50

(2) INFORMATION FOR SEQ ID NO: 2737:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2737:

TAACATTTAT TGTGGAGAAA GTnAGGTATC GTGGTAGTGA GGATTGTGTT   50

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 53 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2738:

TAAATTTAAA CCCGTCCCGG TTTCCCAAAT TTGGAATTTT TTGGAACCCC TGT   53

(2) INFORMATION FOR SEQ ID NO: 2739:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 85 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2739:

ATACCCACCT TGGATTCTTA ATACCCCAAA AAGGCCGGGG CAACTTGGCT TAAAAAACTG   60

GCTTGTTTAA ATTGGATTTC CGGCT   85

(2) INFORMATION FOR SEQ ID NO: 2740:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 70 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2740:

GGAAAGTTTA GTAGTTTAGA GTCGAAAAAT TAGTTTTCTA GTGTAACGAA TCCGGACCCA   60

AATTTTTTTC   70

(2) INFORMATION FOR SEQ ID NO: 2741:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2741:

CGCGCCAATT TACCTGGCGC AGCAGACGCT CAACGAGGAG CACGGCAGCT GCG   53

2322

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        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 60 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear


        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2742:

TGAAGAAATC GCACACACTA TCGAACGCAG ATCGCACATC GAATGCATCA GAATCAGCTC          60

    (2) INFORMATION FOR SEQ ID NO: 2743:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 125 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear



        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2743:

TATCACCTCT TTTGCATATT ATTAGAATAT ATAATGATCT TTATAGAAAG GAAAGAAGAA          60

GAGTTATCAT nGCGATATCG CCCAGCGCGT CGTACACTAT GCCATGAATT ACACAATCAT         120

GCCTC                                                                    125

    (2) INFORMATION FOR SEQ ID NO: 2744:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 59 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear



        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2744:

GAATTTCCCC CGAAACCGGG AAAAATTTTT CCCAACCGGT GGCCTTCCCC CGTTCCCGT           59

    (2) INFORMATION FOR SEQ ID NO: 2745:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 51 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear



        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2745:

TTTTCCTTAA GTTAGTTTTT TTATTGGGCC AAAACCGGCC CCAGGAATTG A                  51
```

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 55 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2746:

TAATTTGGTC ATAATGTTGT TTCAGATGAA ATGCTAACAA TACACTGATT ACAGT   55

    (2) INFORMATION FOR SEQ ID NO: 2747:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 64 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2747:

ATGGTGGAAT GGGATTTAGG TGGATGGCCC CCCCAACCAG CCGGTCCTTT TTAAGGAACT   60

TTGT.   64

    (2) INFORMATION FOR SEQ ID NO: 2748:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 78 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2748:

AACAAGAGTT ACATTGGTTG TGGAAATCAT CGGTTTTAAT TAGTCCAAAA GGATGGATTC   60

AATCGGTAGG GGGGTAAG   78

    (2) INFORMATION FOR SEQ ID NO: 2749:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 54 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2749:

GCAAGTGGCG GAGTCACACT TATAGACAAG AAGTACGACA TCTTGTATGT GGTG   54

```
        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 58 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2750:

 TATTTAGATT CAAAGCATCA AATTGGTTTC GTACCCTTTT GCACATCGGT TGGGATAA          58

 (2) INFORMATION FOR SEQ ID NO: 2751:


        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 79 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2751:

 GGAAAACCCC CCAAATTTTC CCCCCCCGTT GGGAAAAGAG TTCCCAAAGT TGGAATTAGT         60

 TCCCAAACCC GGGAGTTCC                                                      79

 (2) INFORMATION FOR SEQ ID NO: 2752:


        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 68 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2752:

 AGAACCGAGA GATAGTGCCG AGAGAGCGAG AGGTTTTAAT AGAGATGTTT GGCCGTACTA         60

 GTTAGCCG                                                                  68

 (2) INFORMATION FOR SEQ ID NO: 2753:


        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 64 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear



        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2753:

 ATAATCTATG GGGGGACCGT CTGGTAAGGA ACCTGGTTGC CCTGCCAATG AAGCCACCCT         60
```

(2) INFORMATION FOR SEQ ID NO: 2754:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 76 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2754:

ACAAAGGTTT TACGCCCAAA TTGTTCACTG GCTAACTGGG CGATGGTTAG TATTGGCAGC   60

GCAAAAGTGG CAGGGG   76

(2) INFORMATION FOR SEQ ID NO: 2755:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2755:

ACCTCAGGGA CAATTAAAAG TTTTTCTTCG GAATGAATGA CAACAACAAA T   51

(2) INFORMATION FOR SEQ ID NO: 2756:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2756:

ACGTATTCCC TCGTTCTTAG GTCTTCTAAA CATAGGTGAC TTTTTGGTCG   50

(2) INFORMATION FOR SEQ ID NO: 2757:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2757:

AAATGCTTCG TATTAACGCC TATTTTAGCT CCGTTATAGA CACAACTTAC ACA   53

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 51 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2758:

ACACGGCAGC GAATACTCGT TTGGTGAGCC TGTACACATC TAACACGAGA A   51

(2) INFORMATION FOR SEQ ID NO: 2759:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 115 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2759:

GGGAAAACCA ATTAAGGATT TAAAGGTTnA TTTAAAGGGG CCGCCACCGG GTTGGGGATG   60

CCCTTTGGGC ACCTTAAGAA AGCCCCGATG GAAAGGGACC GGTTACCTTA ACCGG   115

(2) INFORMATION FOR SEQ ID NO: 2760:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 227 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2760:

TTTGGCCAGG CCAATTAATT CCTGGTGGCC AATTAAATTT AAGGGGACCT TTGGGGGAAT   60

AAGGTTTAAA ATTGGAAAAT GGTCCAATTT GGACCTTTTG GCCAATTGGA TTCCCGGCTT   120

AAAAAGATTT GGACCGGTAA ATCCCTTTTT AAATTACCTC GGGCCAnGGC CCAACCAAGC   180

CAAACCAATT TAAATCCGCC TGGAAACCAA CCCATAnTTC CTTTACC   227

(2) INFORMATION FOR SEQ ID NO: 2761:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 59 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

ACACTATTGT GCCAGCGCAC CTTCGAGGTA TCTTGCATCA CTCAGCTGTT TTTTACTGT   59

(2) INFORMATION FOR SEQ ID NO: 2762:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 68 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2762:

TTATCCTGTT CCTAAGCCCG ACGGCTCGGC CACACGATTA ACCTTTAACG CCATCTTGTC   60

CAACCTGT   68

(2) INFORMATION FOR SEQ ID NO: 2763:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 116 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2763:

TGGAAAGTAC CATATAAGTA ATGGTAGTCG TTTCAGAAAG ATATAAATCG TTGGGAAAAG   60

AAGAAATGAC AnATTAATGT AAATATTTGT TCATGTACAA ATAAATATAA TTTATA   116

(2) INFORMATION FOR SEQ ID NO: 2764:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 78 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2764:

TTGTTACAGT GGTGTAGCGG ATCGCACGGC CTTCAACTAA GTGGTTCAAT GCTTGATACC   60

AGTTATGAGT GTTGGTGC   78

(2) INFORMATION FOR SEQ ID NO: 2765:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 112 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2765:

ATATATTCGT ATGCACCTTT TGTAAGGCTT TGTAATACGA AAATTATCAC TACAATGATT   60

GCTGTAACGA GTAACGACAT ATATGGCACA CCGTTTTTAT TnGTTTTACC AA   112

(2) INFORMATION FOR SEQ ID NO: 2766:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 123 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2766:

TATTGAAGAT TTTTTCGAAG ATAAAGGTGA CACATATTCA TGTCATGTTT AATATCGTTA   60

CCTTACGTAA CCATATAAGA CTGTAACTTG TGTCATATCA TTCGTAGAAC nTTTGGAAAT   120

GAT   123

(2) INFORMATION FOR SEQ ID NO: 2767:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2767:

GTCCGCGCCA CGGAATGGCC CACGGGACGA TAAGTGAGGG CACCGACGGC CGAACCCAAG   60

(2) INFORMATION FOR SEQ ID NO: 2768:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2768:

GTACGCGGAG CACGAATTCC GCGGATCTGG GAGCATCTCT AGGTAAnTTT   50

(2) INFORMATION FOR SEQ ID NO: 2769:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2769:

CTTAGGTAGC TCAGTGTGTT ATTGAGAGGC CTGTTGGCAG GCCCCGGACG ATC   53

(2) INFORMATION FOR SEQ ID NO: 2770:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 69 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2770:

AAATTGATAG CGTGCACAAA CCAGGTCCAT CCACGAACAT GCCAATCCAG CCCAGGAAGT   60

AATTGCCCG   69

(2) INFORMATION FOR SEQ ID NO: 2771:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2771:

ACGATCATCT GGATGGATAT ACAGAACAGT GTGATTGTAC GTGGTGGGGA AA   52

(2) INFORMATION FOR SEQ ID NO: 2772:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 70 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2772:

TTAACAGTAT GATATTATCA CACGTGAATA GGATATGCCA ACACTGGCAT CGTTGGGGAT   60

AGCGTAATAC   70

(2) INFORMATION FOR SEQ ID NO: 2773:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 67 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2773:

AACATTGTAT TCGTGATTAA GACTTCGATC GGTTCAGTAT TCGGCAGATC CACATGTGAC   60

CATGCTT   67

(2) INFORMATION FOR SEQ ID NO: 2774:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 120 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2774:

CACCCTTGTG ATATCACATT TGTATGTGTT AAGAGGGAGC CCCTTTCCCG ATCAACTGGC   60

GATAAAAACA GTTGAnAAGT GGGCGGGGGT TATTATTTCT GATGACGGCG GGGTTTTTTC   120

(2) INFORMATION FOR SEQ ID NO: 2775:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2775:

AACCGTTGCA GGTnAAGCTG GGCnCACCAT TCTTCTCTAT TAATGGTTCA   50

(2) INFORMATION FOR SEQ ID NO: 2776:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2776:

CATGTACGGT GTCCACACAA GAAGTATTTA GGTGGTTGTT CCCGGATTTA ACCTGGC   57

(2) INFORMATION FOR SEQ ID NO: 2777:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2777:

AACGACCCCG GGTTCCACCG GGGTCCATTA AGCCAAGGGC CAGGGGACCC C   51

(2) INFORMATION FOR SEQ ID NO: 2778:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 124 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2778:

TTGTTCCGGC CTAAAAAATT TAAATTGAAC CCAAGGGGTTG CCTTGGGTTG GGTAATCCAT   60

TTTTTGAATA AACCTTTGnC CCTAATGAAT TTTTCCGCCA TTTAAAGGGT GTCCGCCAAT   120

CCGG   124

(2) INFORMATION FOR SEQ ID NO: 2779:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2779:

GTAAATTTGG GAATTACCGG AAAATTAAGG AAAGGCCAGT AAGGGGTTTC CAGGCCAA   58

(2) INFORMATION FOR SEQ ID NO: 2780:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 371 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2780:

GCACTCCAGC CTGAGCACCA GGGTGAGACC CTGTCTCAAG AACAAAAACA nCAACAnCAA   60

AAAACTTGTT CAAAACTCAC TTCCTGCAGT AATCTTTCCT TGAACAAACT CACCCTCTAA   120

TTCCCACCTG CAATTGTGTG TAGAAATCCA TTCTCGTGTG TAATTTTGGG CTTATATGCA   180

CACATTGAAA ATCCAAGAGC CAGAAAGAGC TCTAAGGAAT TATCCAGTCC AGCTCTGTGC   240

AGCCTGGGCT AGGACCCAGA TCTTTCCCAT TTCCCTGTTC CAAAAATTTT nGGCACAGGG   360

TGGCCACCCT G   371

(2) INFORMATION FOR SEQ ID NO: 2781:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 133 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2781:

GGGGTTGCCA AAGGGGTGTT AAATTTAAGT CCGATGAAAA TTAAGnAAAA AAATCCCATT   60

TTCCCTTCCG GGTCCGTTGT TGGGGCCTTA ATTTCCCGCC AATCCAAGTT TGGTGAATGA   120

AATTAATTAC CGT   133

(2) INFORMATION FOR SEQ ID NO: 2782:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2782:

GTTCAAGTTG ACGCTGGATC ATCTGGTACA CACGTATCCT GCATACTATA GATGTCAT   58

(2) INFORMATION FOR SEQ ID NO: 2783:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2783:

GCTAATTATA GGCCGTCAGG CATTACGnGA TCGAATCTGG CAACTCACAA   50

(2) INFORMATION FOR SEQ ID NO: 2784:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2784:

GCCnCnCTCT GTGACACTGT GTATATACAC CCGCGGGAAT ATCTCCAACG   50

(2) INFORMATION FOR SEQ ID NO: 2785:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 111 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2785:

CTTTGTCTGA CATATTGGGG CAGTGATTTT TGGGACGGTT CTACATGTCG AGTACTTTAG   60

TCAGAGTTGT GAGTAGCGGA CGGGTnTACT TGATATACCC TTAATGTGTA T   111

(2) INFORMATION FOR SEQ ID NO: 2786:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2786:

CATGATGATA CTTGCATGTA CGTTGTACGT GAACGTACAG TTACGTTGTC   50

(2) INFORMATION FOR SEQ ID NO: 2787:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2787:

TCAGCAAGTA GTAAGGATAT CAAACTATGA TCTATTTGAT GTTATGCCAT AA   52

(2) INFORMATION FOR SEQ ID NO: 2788:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

GCATCATGGA ATATTAAAAC AGCTGATATG TTTGAGTAAT GATTGATTGA CGAGATATGC   60

GGCA   64

(2) INFORMATION FOR SEQ ID NO: 2789:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 50 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2789:

TGAGAGAAGT CACAGTCGCC AGCGGCAAAG AACCCGnnAA GATGTGnGCA   50

(2) INFORMATION FOR SEQ ID NO: 2790:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 64 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2790:

CAGTGTATGG AATCTTGTTT GAGTGTGAGA GTCAAAGACT TGGTGATTGA ATGGAAAAAT   60

TGAA   64

(2) INFORMATION FOR SEQ ID NO: 2791:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 50 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2791:

ACAAnGGGTG AAGTTCTCCC ACATGCTGTA TACCGTGGGA TTATTTTTAA   50

(2) INFORMATION FOR SEQ ID NO: 2792:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 83 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

ATTCCTATTC AACAACGGAT ACATAATCTT TTATATCTTC CTTCTAGTCA TATGATACTG   60

GAATAAGTGA TATTTCTTAT AAT   83

(2) INFORMATION FOR SEQ ID NO: 2793:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2793:

CATATGTCAT CGTACGTAAT CATCGATGAA ATATCAACAT CTCGACTTAA TAGGTCAACA   60

AGAT   64

(2) INFORMATION FOR SEQ ID NO: 2794:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 57 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2794:

CCCTACTCCG CGCAATAACC GCATTACCAG ATGCGCTTCC ACTGAGGAAC GACGGAT   57

(2) INFORMATION FOR SEQ ID NO: 2795:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 65 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2795:

AGATAAAGTG TCATCTATAT CCATCTATCA ATATAGATAT GTTTACGGCC GATTTCAATC   60

CGCAA   65

(2) INFORMATION FOR SEQ ID NO: 2796:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2796:

TATACGCCTC ATTACACCCA ATTGGACCCT TTACGTATGG AGTACATTAT AGAATCGA   58

(2) INFORMATION FOR SEQ ID NO: 2797:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2797:

nGCTAAGAAT TTATAAGAGG TTTCGGCAGA TATATATACG CAAGTATCTG   50

(2) INFORMATION FOR SEQ ID NO: 2798:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 118 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2798:

AAGCAGTCTT TCACAAAAAG TGAATAATCA CTAGTTCATT AATTTGCATT TGAACCTTCA   60

TATAATGCAT ATTACTTAAT GTACAAGCAA AGATGTATTT ACCTATCAAA GAATTTnC   118

(2) INFORMATION FOR SEQ ID NO: 2799:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2799:

CCATAGAACC TGTGAATACC TATACATATC ATACTGTGGA ATTCGTTACG AGG   53

(2) INFORMATION FOR SEQ ID NO: 2800:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

CCAATTCAGA CTGTTATTCT CTCTTCGTGA TAACCCGTGA TGTTTGTCTG C   51

(2) INFORMATION FOR SEQ ID NO: 2801:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2801:

GGGGGnGCAT ACCGCACCGA AGCATCAGAC GATGTGAGCG ACCTACCTCC   50

(2) INFORMATION FOR SEQ ID NO: 2802:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2802:

CCGTAGCGCA CATATGACGA GACCAAGGAT AACGTGCAAn GnCATATTGT   50

(2) INFORMATION FOR SEQ ID NO: 2803:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2803:

CACGTCATGA ACGTGCATTC AACACAATCA TTTACGAGAT GGACCAAGAC   50

(2) INFORMATION FOR SEQ ID NO: 2804:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 126 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2804:

TATGGTGTTT ATTTTAGCGC TnGTTGTGCT TTGTCTTCAG CATCTATAAC CTAGTGCGAT   60

CTATTG   126

(2) INFORMATION FOR SEQ ID NO: 2805:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 88 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2805:

AAAAGCGCAT ATGGTGTTTT TCTCATATCA CTCCAGGACT CAGCAGCTGG AAGGAGTTAA   60

GAAGTAATAA GGTGCCACCC TAAATCCA   88

(2) INFORMATION FOR SEQ ID NO: 2806:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 66 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2806:

TGGATCCGGT ACCAAATAGG GACTACCGGG AATGTCCCGG GGGGCCTAAT GCCGAATGGG   60

GCAACG   66

(2) INFORMATION FOR SEQ ID NO: 2807:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 66 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2807:

CCCGCTAACG TGGGGAAAGT TTTGAAGTTA AGAAGGAATG GATTCCTAAC GGGGCGGGGT   60

CCAAAC   66

(2) INFORMATION FOR SEQ ID NO: 2808:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 56 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2808:

ACAAAGCAGT ACTGAACTGG TTTCGTTGGA GCCCGTGTTG CTGTTTATTC ACGGCA   56

(2) INFORMATION FOR SEQ ID NO: 2809:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 63 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2809:

AGGGGGCGTA CAACATAGAT TTGCGAGATA CTCAGCATTA CACTTCCATT TAACTTATTA   60

TCC   63

(2) INFORMATION FOR SEQ ID NO: 2810:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2810:

TTAGGCGCCT GTTCCAACCG CACCCATATA AGGCGGTCGG CTGCACGCAC GACGTATG   58

(2) INFORMATION FOR SEQ ID NO: 2811:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2811:

AAACCCCCAA GGAATTAATT TTCCGGTTTT CCAACCCCTT AAAAAGGGAA AGGCCAAT   58

(2) INFORMATION FOR SEQ ID NO: 2812:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 72 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

CATCATTAAG GCAAAAACTT TCACAAAGTC ATGAGGCGCA AAAGGTATTA TTATAACACA 60

TCCCGCGTTG GG 72

(2) INFORMATION FOR SEQ ID NO: 2813:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2813:

CCATTTAAAG CGGTACGGGG CTTGGTTCAG GAACGTCGTT AGACAAATTC GGT 53

(2) INFORMATION FOR SEQ ID NO: 2814:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2814:

TAGTACCCAA TTTCCAGTCG AACCAGGATG GGACCAGAAG CCAAACCAAC GTT 53

(2) INFORMATION FOR SEQ ID NO: 2815:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2815:

GAAAAAAAGG CCTTGTTTAC CAAAGGGGCC AATTTTTTCG GTTCAAGGTC CAAACCTACC 60

TT 62

(2) INFORMATION FOR SEQ ID NO: 2816:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

TCTGAATGAC GCCGAAATCC CATCTGAATT CATGGGATTT TCCACTTTCA   50

(2) INFORMATION FOR SEQ ID NO: 2817:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2817:

CGTTACTAAA GCTACATAGT GCGTCATTTA AGATTATAGC AAGTAGCATA T   51

(2) INFORMATION FOR SEQ ID NO: 2818:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2818:

CATTCACCAT AATATTCATT GTTCCATTAG CATATCAGGC ATGTCACGTG CACA   54

(2) INFORMATION FOR SEQ ID NO: 2819:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2819:

GTGTATCAAA TGAGCATGTT nCAATGGTTC AnCATGGCGT TTATGGCACT   50

(2) INFORMATION FOR SEQ ID NO: 2820:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2820:

ACAATTGCGG CTGCTCATTG TGAGCACGAC TTTATCATGG TTGGGTTCAG   50

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 102 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2821:

CAGTAGTACG TAAAAATGAA TCACTTGAAG ATGCGTACGT AGATTTTAAA CGTCAGTTCT   60

AAAAAGTGGA CAATCCAAGA GACGTAACGG AATTTnCGAA AA   102

(2) INFORMATION FOR SEQ ID NO: 2822:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2822:

GAGTACTTAA TCCGGCACCG TTTACTTCTG GGGGCATCGA CTAAGTGGGG CGGCC   55

(2) INFORMATION FOR SEQ ID NO: 2823:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 71 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2823:

ATTGGTTTCT CATAAACACT TTTCTATGAA TTTGTATGTA TTTGTTTATT AAAATCTCTA   60

ATTCTTATGG A   71

(2) INFORMATION FOR SEQ ID NO: 2824:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 134 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2824:

CCATTGAGTG TGAGTATATC ATCGATCAAT ATGCAACATT TATCAGGTGC ATGTTGCTTA   60

TGGATAATTG AACA   134

(2) INFORMATION FOR SEQ ID NO: 2825:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 57 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2825:

CCAGAATGAT GAGCTACAGG ATCAGCCCAG ATATGCAGGT AAACGGGCCA ACCATTG   57

(2) INFORMATION FOR SEQ ID NO: 2826:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 89 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2826:

CAATAATGCT GAACAGCAAC GCATCTCATT CTAAAATCGC TCAGAATCAC ATCCCATGCA   60

CACATAATAA GTGGCACTTA GCTTAAAAT   89

(2) INFORMATION FOR SEQ ID NO: 2827:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 64 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2827:

CGGATTAGTG GTGTAAACTG GGTGACCCAT ACCACACCTC GCGTGTTGTG AAAAAAGGAC   60

TTAA   64

(2) INFORMATION FOR SEQ ID NO: 2828:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 51 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

TATACAGAAA ACAGCGTGCC GTTATCCATT ATCACATGAC ATATGTAGTC C   51

(2) INFORMATION FOR SEQ ID NO: 2829:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 68 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2829:

GAGATACGGT CTTCGTATAT GATATGTGCA TATTTAGATA GTCATTTATG AGAGAACGTG   60

GACGTGAG   68

(2) INFORMATION FOR SEQ ID NO: 2830:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 58 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2830:

TGATGATTGT TTATGATACG ATATGTAAAT GATAATCATC CAGGAGGTCT AGCATGGT   58

(2) INFORMATION FOR SEQ ID NO: 2831:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 54 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2831:

CCTAACAAAC ATAATTAAAC CCATAAATGC ATCCAATGCG GTTAAACCAT GAAA   54

(2) INFORMATION FOR SEQ ID NO: 2832:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2832:

(2) INFORMATION FOR SEQ ID NO: 2833:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 69 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2833:

GTCTGCTACC CTTTCAGAGC AACATGCTGA GTGTATAATG CCGTGTATAG GGGACAATGC   60

CATTCACTA   69

(2) INFORMATION FOR SEQ ID NO: 2834:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2834:

AACACCAGCT GGTAAGTATC ACGTTACATT TTGTGTCTTC ATGATTAATA AAAAC   55

(2) INFORMATION FOR SEQ ID NO: 2835:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2835:

AGAGCTTGGA TGTCGTTCGT AATTGATGCT CTAGCTCCAT GGGGCCCATG   50

(2) INFORMATION FOR SEQ ID NO: 2836:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 138 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2836:

TTTCGTCACT ATTGCTCATG CATAGACATT TGCAATACCG GCAAATGACG ATGGnATATG   60

TTAATGGTCA ATACAGGG   138

(2) INFORMATION FOR SEQ ID NO: 2837:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2837:

GTTGGCAACT TCAGTCGCTA CTTTAACGCA TCTCACAGTC CTCCTCCCAA AGAGAACGTA   60

T   61

(2) INFORMATION FOR SEQ ID NO: 2838:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 78 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2838:

ACGTGAATCC CGTGAGGCCA ACAGTGATTT GGATAATTAC ATGGATGTTT GACTAATGGT   60

CATTCACACC CAGATCAG   78

(2) INFORMATION FOR SEQ ID NO: 2839:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 90 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2839:

ACTTAAAATC TCCTCTTGCC TAACTTCCAC ATTCTTATCG ATATGAATAC ACCATACGTT   60

TTATAGATAA GTTGATGTTG ATGCATATGT   90

(2) INFORMATION FOR SEQ ID NO: 2840:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 61 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2840:

TATATTTAGT CTGTTATACA AGGTGTATCA CAGCGGTAAT ATGCCTCTAC ATGGCCATAT   60

G   61

(2) INFORMATION FOR SEQ ID NO: 2841:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2841:

GGGCCCCGGC GGCAGGGAGG AAGGGGGCAA GGGCGGCGCC AAGACCACGA CCGGCACC   58

(2) INFORMATION FOR SEQ ID NO: 2842:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2842:

TGTACAGGTG CAGTTAGACC GCCTGACGGA ACGAGACGTG CAATTGCCAG CAACGCACAA   60

(2) INFORMATION FOR SEQ ID NO: 2843:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2843:

AAACATGTGA AGTGATCGAG GTATGGACGG AGTAATGATC GCACAAGACA TAGCATCCCC   60

GT   62

(2) INFORMATION FOR SEQ ID NO: 2844:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2844:

ACGATTTAGT TTGAATTTCT ATTAGGGTTT GGTGATTCTA CTACTTCTGA TA   52

(2) INFORMATION FOR SEQ ID NO: 2845:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 63 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2845:

GATTATCACA ATTATGCAAA GTTGTCTAAT CGTTAGACCA ATTTCTGTTC AAACACCACA   60

ATC   63

(2) INFORMATION FOR SEQ ID NO: 2846:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2846:

CGTTATATAA GAnCGACATG GAAGCATGAT GAAATATTGA ATACATCATA   50

(2) INFORMATION FOR SEQ ID NO: 2847:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2847:

CCACAGGTGC ATCCGCCTGG TATGGAGCCG GCCAGTCTTC ACTGCTTTCA C   51

(2) INFORMATION FOR SEQ ID NO: 2848:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 113 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

AAAACTGTCC CAAGCTGTTT TTATTTAGAG CAACCAATCC AATTTAAACC CCCCACCATT   60

ATTTTAAATA ATACCATTCC AGCGAAAGCC CTTTCCAnGG TTTTGGAATA TAA   113

(2) INFORMATION FOR SEQ ID NO: 2849:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 155 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2849:

CATCTGGAAC TTTTTAATTC CAGAAGGGTT CCAGAAGGTT TCGAAATCCC TCCTAATGGG   60

CTCCATTAAC GGATTTTAAA TTTTTTAATA ATTTTAGGCC AAAAAAATTAA TTTCCAGGAA   120

AAGTAAGTTT CCAACCCGGG TAAGAAATTA CCnAA   155

(2) INFORMATION FOR SEQ ID NO: 2850:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 64 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2850:

CACAAACTAA CATAGAAGGG CCATCATCAG GTGCTATTAA ATATCTACGC TAGATTGTAA   60

ATCA   64

(2) INFORMATION FOR SEQ ID NO: 2851:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2851:

AATTATTCAT CAATAGCTCT TTACGATTCA CAAATCTAGG TACTTTTCAG ATCT   54

(2) INFORMATION FOR SEQ ID NO: 2852:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2852:

AAGCCCCTTT AAACTGGGCC TTTAAGGAAC GGTGGCGAAA ATCCCCAAAT TCCGGGCA   58

(2) INFORMATION FOR SEQ ID NO: 2853:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 103 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2853:

AAAGGTTTCC ATTCGGTCCC ATTAAGATTT TTTTGGAAAT TCCATGGAAG GATGGTTGGT   60

CCTTTAGGCC TGGTAGGTTA TCCTTTTTGn AGGTGGTATC CAG   103

(2) INFORMATION FOR SEQ ID NO: 2854:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2854:

GGCCACGGTC ATTCCTCCAA GCCAACCAGT GGACAAGATG GGTGGAAGGC GCAGG   55

(2) INFORMATION FOR SEQ ID NO: 2855:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2855:

TATTTGGCAT TCAAATAACG TAAACGGATT TTGAAGTAAT TTACATAAAG AGG   53

(2) INFORMATION FOR SEQ ID NO: 2856:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2856:

ACAATTTGAC AATGACTGGG ATGCTGACAC TTGATATGAA GACAATTGAA GAT   53

(2) INFORMATION FOR SEQ ID NO: 2857:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2857:

AACTGCGTTA CATGCTTTGC TTTTAACTGA ACCCAGAACA ACGGTTTCGG   50

(2) INFORMATION FOR SEQ ID NO: 2858:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2858:

CTTTnnTAnC TTCATCTCTA TTATTATTGT CCGAATTACT ACGTGGACAA   50

(2) INFORMATION FOR SEQ ID NO: 2859:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 66 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2859:

TCCAGGTCGA ATTTATTGCC AATTAGCCTC CCGGGTTAAA AGGGTGGGTG TCGGGTAAAA   60

TCGTAC   66

(2) INFORMATION FOR SEQ ID NO: 2860:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 72 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

GGTATCCAGT CCCCCGGAGG GGTGACAAAC TTCCACGCCC AGTGGGGGGA CTACCGTTTT   60

GGACCAAAGC CC   72

(2) INFORMATION FOR SEQ ID NO: 2861:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2861:

AGTGTCGAAC AATTAAAGAT ATTGAGTGAC AGGATTGCTT AAGGGCCGGT CGGAACAG   58

(2) INFORMATION FOR SEQ ID NO: 2862:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2862:

TTAGCGGTAA ATCCGAAGAA CTAAGAAGAC GTCAAGAAGG GGATATACGC   50

(2) INFORMATION FOR SEQ ID NO: 2863:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2863:

GCAAAAnTGA GAGCTCAAnC TGCAnnAAGC AAATCAACGA AAGATTAGGT   50

(2) INFORMATION FOR SEQ ID NO: 2864:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 246 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2864:

AACTATTCTG GATTTGTGCA GTGGCTATGG GGATGAGTGC GTTCCCCTCT TTCATGACGC   120

AGGCGAACGC CAGCAACGCA ACCACTGATC AATGCTGAGC CAGCTGTAGC CGCCCAGACG   180

GAACAAAATC CGCAGTGGGG GCAAGTGATG CCGGGCGTGC AnGGCGCTGA TGnCAGTTCG   240

TGGCAG   246

(2) INFORMATION FOR SEQ ID NO: 2865:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2865:

ACAGATGATA CCTCTTGATC ACTTGCCAGA GATCGTCTAA GTCGTCCTTG   50

(2) INFORMATION FOR SEQ ID NO: 2866:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2866:

AATACCACGC TGACCTTAAT AAGCCATCAT GGGGGAAATC ATGACCGCAA T   51

(2) INFORMATION FOR SEQ ID NO: 2867:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2867:

CAACTTGGTA AGTGGTCGTT TTGGGCCCCA CCCTACCCGT TTGGACCTGG   50

(2) INFORMATION FOR SEQ ID NO: 2868:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 223 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2868:

```
CCCAACCCGG TTCCGGGCCT TAATTTTTTn CCTTTTAAAG GAAAAAAAGG AAAAACCGGT        60

TAATTCCGGC CCAAAAAnCC CGGAAGTTGG AAACCTTTTT TTAATAAAAA TAATGGACCG       120

TCCCAACCTT TGTTGCCAAA AGGTGGCCTA AAGGTTTAAA AAAAACCGTT AAAATCCATG       180

GCCAGGATCC AGCCTAAAAT TGAAACCATT ATAATTGATA AAC                        223
```

(2) INFORMATION FOR SEQ ID NO: 2869:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 66 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2869:

```
TGGACCTTTG GTAATATGAA TTGAATGGTG CTTTGTGGAA ATCGGGAATT CGCCTCGTGC        60

CTTGTA                                                                   66
```

(2) INFORMATION FOR SEQ ID NO: 2870:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2870:

```
AAnAGCCAnG ATCATGGTAT ATCCATTAAG AGACGAGAAG ATCGATGCCC                   50
```

(2) INFORMATION FOR SEQ ID NO: 2871:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 125 base pairs
        (B) TYPE: nucleic acid ·
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2871:

```
TTATTTGGAC TTACAAGGAG AATAGTCAnT TCTAGGAAAG TGGTGCGAAA GTCACTTACC        60

AATATACGGG GATTATTCAT CCATCGTCGG TCGGTCATAT GATACGGAAT TAACACGCCA       120

CTCCG                                                                   125
```

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 62 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2872:

CAACACCTGA CGTGTATAGA ACTCATCTCT TCAATAACGT CGCTGTCAGG TTACGAAGTC   60

GA   62

(2) INFORMATION FOR SEQ ID NO: 2873:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2873:

TATACATTCC ATTTAACACC TTAACACATG CAAGTTACTT CCTCCTCAAG CATC   54

(2) INFORMATION FOR SEQ ID NO: 2874:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2874:

GCTGAAAGGA GACTTCTGCA GGTGTGATCA CAAACTGCAC ATCTACACAA GCCATT   56

(2) INFORMATION FOR SEQ ID NO: 2875:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 112 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2875:

AGCGCGACCG CGAGAAGGGA GGGGGAGCCA GAGCAGCAGC AGGCCCCAGG GCGAAACCCC   60

CAAGAGGAGC GAGnAAGAAG GAGGGAAAGC CCAGCAGGGG CGCCCAGGCC AG   112

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 50 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2876:

GnGCGTTnnA nCGGTCGCGT AGAGATGTCG GGTCTGTAGT AGATCTGGGG   50

(2) INFORMATION FOR SEQ ID NO: 2877:

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 68 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2877:

ACCTTGACTT TGCAGACGAT GATGCTTTTG GCTGGGATCT TCACCATCTG GCAACTGAAT   60

ATGGTTGG   68

(2) INFORMATION FOR SEQ ID NO: 2878:

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 53 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2878:

CTCCACCTGA TGCATGCCCC CATATCAGGA AAATGATAAC CTCGGACACC TTC   53

(2) INFORMATION FOR SEQ ID NO: 2879:

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 75 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2879:

GGGAACTTTG ATCTGCCCTT GAAATCCTGA AAAATGTTTG CAAACGGGAA TGATCTTGTG   60

CCTTGCTTTG AATGA   75

```
(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 341 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2880:

AGAGAGGCCG AGATGGCAGA TGAGATTGCC AAGGCTCAGG TCGCTCGGCC TGGTGGCGAC        60

ACGATCTTCG GGAAGATCAT CCGCAAGAAA TACCAGCCAA AATCATTTTT GAGGATGACC       120

GGTGCCTTGC TTTCCATGAC ATTTCCCCTC AAGCACCAAC ACATTTTCTG GTGATACCCA       180

AGAAACATAT ATCCCAGATT TCTGTGGCAG AAGATGATGA TGAAAGTCTT CTTGGACACT       240

TAATGATTGT TGGCAAGAAA TGTGCTGCGG ATCTGGGCCT GAATAAGGTT ATCGAnGGTG       300

GTGAnTGAAG TTCAGnGGTG GACATCCGTC TATCACGTTC A                          341

(2) INFORMATION FOR SEQ ID NO: 2881:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2881:

GCGGTTACTG TGTAATGGCA TTAAATATGA AACGAGCCGA TGGAGCGTTG                   50

(2) INFORMATION FOR SEQ ID NO: 2882:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 81 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear


    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2882:

CTCATCATTT GTAGTTGGAA AGGTTTATGT ACATTTGGAA AACACCGACA CATGACGTAT       60

CTCCATTGCA ATTTACACAA G                                                 81

(2) INFORMATION FOR SEQ ID NO: 2883:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 77 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2883:

TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT   60

TTTTTTTTTT TTTTTT   77

(2) INFORMATION FOR SEQ ID NO: 2884:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 104 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2884:

ACGGTGTGCT TGATGCACTT GGAACTGTGA GTTTGGGTGT GACTTTGCTT TGGCTTGCTT   60

GCTGAATGTT TTGACTATGC ATTGCGTATA TGACTTGnAG CGCG   104

(2) INFORMATION FOR SEQ ID NO: 2885:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 127 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2885:

AGCAACGTGT CTGTCAACGT GGTGTCATTG GAAAAGGCGT CATGTATTGn CCGGTGGGAT   60

TTACGTGTAG TCACACATGT GCCCAATTAT TGTTTTGAGG CCAACTTGAG TAGGTTGATG   120

GTTATGT   127

(2) INFORMATION FOR SEQ ID NO: 2886:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2886:

TGAGCGAGTG CTGTGTGAGC GCGAGGTTGT GAGAGTTAGA ACCTTGTGAG C   51

(2) INFORMATION FOR SEQ ID NO: 2887:

       (A) LENGTH: 63 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2887:

TTGAAACCGC GAACCTGAGT TCTGGTTAAC TACAGTCTGG TATACACATT GAGGGAAACT   60

TCG   63

(2) INFORMATION FOR SEQ ID NO: 2888:

       (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 50 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2888:

AGTAnCATAC nCAACTATCT CAGCATACAA TATTGGnCAC CTCGCAGCTT   50

(2) INFORMATION FOR SEQ ID NO: 2889:

       (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 115 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2889:

AAAnATAATC CCGGTTTTAT CCCCCTACCT AATTAGTGGG AAAAGTACCA ATTGCCAATT   60

GGTAAAATAG GTTGCCATAA CGGCCTCCCA AAAGTAAATT CCCTTTTTTG GTTTA   115

(2) INFORMATION FOR SEQ ID NO: 2890:

       (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 147 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2890:

AATCGGTCCG TTATACTCTT CATAATATTG TGGCGCAACC ATTTCAACTT TATCTTTTCT   60

TATAAATAGC ATCATCGCAA TAnTAAAGAA TAATATCGGA ATGATTAAAG TAACGATAAG   120

(2) INFORMATION FOR SEQ ID NO: 2891:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2891:

```
AACACAACAA GTTGTTAAAG ATGCATTTTT ATCACAACAT AAATCTATTG GACGTAAAGC    60

TCAAGAAGCA TACTTATCAT ATCGTTTAGA ACAAGAGTAT AGTAAAGATG ATATCTTCCA   120

AGTATATCTA AACAAAATTT ACTATTCTGA TGGCGTAACA GGTATTAAAG CTGCTGCTAA   180

GTATTACTTT AATAAAGATT TAAAAGATTT AAACTTAGCG GAAGAAGCTT ATTTAGCCGG   240

TTTACCTCAG GTTCCAAACA ACTATAATAT TTATGATCAT CCAAAAGCTG CTGAAGATCG   300

TAAAAnCACT GTTTTATACT TAATGCATTA TCATAAACGC ATTACAGATA AACAGTGGGA   360

AGATGCTAAG AAAATCGATT TAAAAGCGAA CTTAGTAAAT                         400
```

(2) INFORMATION FOR SEQ ID NO: 2892:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 149 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2892:

```
CCTAATTAAA CCTCCATCCA TCCTTTTGAA GGGGGATCTT TAATAAAnCC GGAAAGTTTG    60

GGGGAAAAAT CCTCCATCCT TTGAAGGGGG GGGCTTTCCA ATGGCCTTTA AGAATGGCCT   120

TTTCCAAGCC AACTTTTAAT TCCCCCGGT                                     149
```

(2) INFORMATION FOR SEQ ID NO: 2893:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 130 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2893:

```
GCCCGAAGTA TTCTTGTAAG TATTATGATA CTCGGTnCTT TTTATGATTT ATGTTAATTT    60
```

TTATGTTAGT   130

(2) INFORMATION FOR SEQ ID NO: 2894:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 65 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2894:

GATGAGACCT GAATTGATTG CAACCCAAAT CGGCATATGC AAATTGCATT AAAGTTGGTT   60

CAACG   65

(2) INFORMATION FOR SEQ ID NO: 2895:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 102 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2895:

CGCACAACAC ATTTAGCGAC TCAGATGTCG CGCGAATGGA CCGATATGGC GTGTCTACAC   60

ATTGTCATAT TGTACGAATA GATGAGAAAT TnCAAAGACC GA   102

(2) INFORMATION FOR SEQ ID NO: 2896:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 69 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2896:

ATTAAGTGAT GGGCTAATGT TTACGCCCCA ACCAAAGGTT TCCAAAGAGC CCTTGTTGGG   60

CCTGTGTTG   69

(2) INFORMATION FOR SEQ ID NO: 2897:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 80 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2897:

ATTGAATTAA TGTCCCAACC AAACGAATGG TTGCCCTTTT TCCATCCAAA GGGGGCTAAT   60

TGGGAAGGGT ATTGGTTCCC   80

(2) INFORMATION FOR SEQ ID NO: 2898:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 53 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2898:

CAAATCCTGG AGATGAGCGT AACCAAAAAT AACGTTGAGA AAATGACCAC ACA   53

(2) INFORMATION FOR SEQ ID NO: 2899:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 51 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2899:

ATCGTGAACC TCTCATCCAA TCACTCATGT GAGTGAATTG GATGACCTGA A   51

(2) INFORMATION FOR SEQ ID NO: 2900:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 52 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2900:

AGCTTTCAGG GCTATATCAG ACCCACGCAT TCATCCACGT GAATGAAACA CG   52

(2) INFORMATION FOR SEQ ID NO: 2901:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

GGTACTGACA GAGGGACAAG GTGGAAAGGn TGCCAATGTA AGAATACGGT   50

(2) INFORMATION FOR SEQ ID NO: 2902:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 72 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2902:

TGTCTGGAAT TCAGGTGAAT TGATGCGGAG ATTTAGGTGA TTAAGGAGTG TTGATTATGA   60

AGATGACCAC TT   72

(2) INFORMATION FOR SEQ ID NO: 2903:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 50 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2903:

CATGCCAAAG CAGTAGGCAA GCCGCTTAGC AAGCCAAAAA CGTCAGCCCA   50

(2) INFORMATION FOR SEQ ID NO: 2904:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 58 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2904:

TTGATGTTAC CTGATCGCAA TCTTGACCAC CTGGCAGGGT CTCATTGTTG GGTATCGA   58

(2) INFORMATION FOR SEQ ID NO: 2905:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 69 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2905:

GCGGTCTAT   69

(2) INFORMATION FOR SEQ ID NO: 2906:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 53 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2906:

ATTCCATTAG GTTCAATTAA AAATTAACGG GGTTATGGTT CCGGTAATTC GGG   53

(2) INFORMATION FOR SEQ ID NO: 2907:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 57 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2907:

AAAGCTAAGA AAGGAGGATT AGCTGGTAGT GGAGGAATGT TAAGTGAGGC TGGTGAT   57

(2) INFORMATION FOR SEQ ID NO: 2908:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 86 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2908:

GGGAATGGCG CATGAACGTG CACATCAAAT GACACTGCAG GAAATCAATT AGCACGGATA   60

TGGCATAAAG ACAATGGTAA AAGTGG   86

(2) INFORMATION FOR SEQ ID NO: 2909:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 50 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2909:

(2) INFORMATION FOR SEQ ID NO: 2910:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 109 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2910:

GAATTTGTTC CGAGGTATCG AGGACTACGC TTATAAGGTG CTTACAGATA CATTTAnCAT   60

TAATGGCGTG TGCTGCTGTA TGGGTTATAC TGTTCACAGG TTTAAGAGA   109

(2) INFORMATION FOR SEQ ID NO: 2911:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2911:

TTGTCCCCAT AGGGAGAAAT AATTCCGCCT GGGCAAAACC AAATCCACGA GCTTCTAAGG   60

(2) INFORMATION FOR SEQ ID NO: 2912:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 55 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2912:

TAGATGTATC CAGCTGACAT TAGCTATTGG TAAGGTAACG GCTTACCAGG CAACG   55

(2) INFORMATION FOR SEQ ID NO: 2913:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 123 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2913:

GCCATGAGGC CCACCCATCC ATGTTTATGG ATGGTGGATT GGGGAATTAC TTGTTTCAAA   60

(2) INFORMATION FOR SEQ ID NO: 2914:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 58 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2914:

ATCCGTAATT CTGGCCTACC AAGGGTTTAG GCCAATGGGC CATTCTTTTA TTTAACCC   58

(2) INFORMATION FOR SEQ ID NO: 2915:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2915:

TGGTGCGACA GTGGTAGGCT TTTTACGGTn TGCnGGCGAG AGTTCTGTAG   50

(2) INFORMATION FOR SEQ ID NO: 2916:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 68 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2916:

CTGTTACGCT ATGCCCCCCA GTTGTATGTT GAGTGGAATC GTGTTTTTCG ACCTGCCTTT   60

GCTTTTTT   68

(2) INFORMATION FOR SEQ ID NO: 2917:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 65 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2917:

GGAAA   65

(2) INFORMATION FOR SEQ ID NO: 2918:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 101 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2918:

AAATTCCAAT CCTGGGAATG GGATTCCATG GTnTTCGGAA AAATCCGCCA CCCCAAAAAA   60

ATAAATGGGT CCCTTCCCTT GGAAATATTA CCTTTACCAG G   101

(2) INFORMATION FOR SEQ ID NO: 2919:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 75 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2919:

TAATAAATCC ATGACCACCG TCACGACGAT CTGACTGATA AACTAATGAC ATATGACTGG   60

TGTACACACC GTATG   75

(2) INFORMATION FOR SEQ ID NO: 2920:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 56 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2920:

CTTGGATTGA CCATCATTAG TTTTGGTCAC TCTAAGTTGT ACTGTCCGTT GTACAA   56

(2) INFORMATION FOR SEQ ID NO: 2921:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 65 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

GCTCATTGCT TGTATATTAA TCCCTGAAAT TGACCGTGTA TATCCCGTCG ATCTATCTTG   60

TCCTG   65

(2) INFORMATION FOR SEQ ID NO: 2922:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2922:

GCAATATTCT AATCTGTATG TTACAGCACA TGGATATAGC ACATCCGGGC   50

(2) INFORMATION FOR SEQ ID NO: 2923:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 54 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2923:

TGTGATTTAA CAGGATTACA CAGGTGTACC AGCCGATAGT TGATTAAGCT TCTT   54

(2) INFORMATION FOR SEQ ID NO: 2924:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 50 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2924:

ATCCTGGGAA GTGCTGAAAA ACCACTnCAC TAAAGGCATA GGAnCCACAC   50

(2) INFORMATION FOR SEQ ID NO: 2925:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 52 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2925:

(2) INFORMATION FOR SEQ ID NO: 2926:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 62 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2926:

TTGGTCACAT TTATTCTCGT GTTGTGCCGT TCTTCTTCAG TACTAAAGAC AAGGTGATTC   60

GG   62

(2) INFORMATION FOR SEQ ID NO: 2927:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 56 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2927:

CAAAAGGCTA TCCCACCTGA TTTGCAAAAG GAACTGGACT GCAAGGGAAG TCTCAG   56

(2) INFORMATION FOR SEQ ID NO: 2928:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2928:

TGATCTTGCT ATTTAGTTGC GGCTTGGATT CATTTGGCAT GGTTAAGATT AAATTAGATG   60

CTTCATTCAT TCAAGATTTC TTCATGTTAG CATTCTTTAC GACAATCGGT CTTGGTGCAT   120

CATTGAAATT ATTTAAATTA GGTGGCAAAG TCTTGCTATT ATACTTTATG TTTTGTGCTA   180

TCATTTCAGT CATTCAAAAC ATAGTTGGTG TATCACTAGC AAAAGTATTA AATATTAAAC   240

CTTTGTTAGG ATTAACAGCA GGTTCCATGT CTATGGAAGG CGGTCATGGT AATGCTGCTG   300

CTTATGGTAA GACAATTCAA GATTTAGGTA TTGATTCGGC ACTGACAGCG GCTCTTGCAG   360

CTGCAACTTT AGGTCTTGTA TTTGGAGGGC TATCGGTGGT   400

(2) INFORMATION FOR SEQ ID NO: 2929:

(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2929:

CTGAACCGAT GGCGCACTTT GCTACGCCAC CTACAGCAGA TCCCAnGGGG GGnGAAGCTT   60

ATACTGAAGC TCTACGTTCA ACATTTTTCC ATTGGGGATT CCATGCTTGG GCTGTTTATG   120

GTGTTGTTGC GTTACGTTTG GCATATTCGC AATTCCGTAA AGGTGAACCA GGTTTATTAT   180

CTAGAACTTT ACGTCCTCTT TTAGGTGATA AAGTAGAAGG TCCTATTGGG ATTTTTATTG   240

ACGTTTTATC TGTATTTGCG ACAATCGTTG GGGTAGCCGT TTCGTTAGGT ATGGGTGCTC   300

TACAAATTAA TGGTGGTTTA CATTACTTGT TCAATGTTCC AAACAATACG TTTGTACAAG   360

CGATTATCAT CATTGTTGTT ACTATCTTAT TTATAGCAAG   400

(2) INFORMATION FOR SEQ ID NO: 2930:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2930:

ATGTAGATCT ATATGATGAC TTTTTACAAG ATCCATCATC TGTACCAGAA GATTTAAAGT   60

CTTATTCAGC ACAATTAAGA ATGATGACTC AATTGTACCA GCTTTAAAAA GTACAAGTAG   120

TCAnAATAGC GACGGCACAA TTAAGCGTGT CATGCGTTTA ATTGATAATA TTCGCCAATA   180

CGGGCATCTT AAAGCCGATA TTTATCCTGT AAATCCTCCA AAAAGGAAAC ATGTACCTAA   240

ATTAGAGATT GAAGACTTTG ATTTAGATCA ACAGACTTTG GAAGGTATAT CAGCAGGAAT   300

TGTTTCAGAT CACTTTGCCG ACATTTATGA TAATGCCTAT GAnGCAATTT TAAGAATGGA   360

AAAACGTTAC AAAGGnCCAT TGCATTTGAG TATACCnTAT   400

(2) INFORMATION FOR SEQ ID NO: 2931:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

```
GGTTATACAA TCTAGAATCG CATGATAATT TAATGCTACA AATCGATAGT ACAATATATC       60

TACCGTGAAT AACTGTGCAA ATAGTGACGT TGTAGCCGCC ATACGCATTT CATTTTCATC      120

AGTTCTGCCA TAAATCAATG CATAGTCTGC AATTTGAGCC ACTGGATTAT TAGCTGTACT      180

AGATATAGTT ATGATGGGAA TACTGTAATG TGTGGCCACC TGTGCAATTG ACTGCAATTC      240

ACTATGGACT ACCTTGGATT CGTCACAAAA ATCATGCAAT CTCTATCATC ATGCGTCGCA      300

AATGTTGACA CAAGTGAAAT GCGTTTCCAT GTAATAACCT GACATTTGAA GCCATACGAG      360

ATAACTTTGG AAAAAGATCA CCAATAGnCC AACTCGATGG                            400
```

(2) INFORMATION FOR SEQ ID NO: 2932:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 392 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2932:

```
CTTTCAGTAG CAGCTACAAT TGTCTTTAAC ATTTAAGTTT AAAGCTGTAT GTGTCAACCG       60

CAAATACCGA TAGCCATTCA CTAATGAAGT TTCAACTAAT TTAGTACGAT CTGACAATAA      120

CTTTTTGTAA TCTTGGGCTG CTTCAGCTGA TACAGCAATA TTTCTCATTG TTTTAACAGC      180

TTCTTCAGGA TATAAACCAG CAGCAGTTTC ACCAGATAAC ATTACTGCAT CTGTACCATC      240

ATAGATTGCG TTGGCAACGT CACTAGCTTC TGCACGTGTA GCACGTGGGT TACGTTGCAT      300

AGAATCTAAC ATTTGTGTAG CTGTAATAAC TGGTTTACCT AATTTGTnAC ATTGTCTGAT      360

TAAATCTTTT TGAACCATTG GGACTTTnTC AG                                    392
```

(2) INFORMATION FOR SEQ ID NO: 2933:

        (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 400 base pairs
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: double
             (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2933:

```
TGACTATGGT ATCGCATGTT GTGTATCAGC GATGACAATT GGTAAACAAA TGCAATTCTT       60

CGGTGCACGT GCGAACTTAG CTAAAACATT ACTTTACGCT ATCAATGGTG GTAAAGATGA      120

AAAATCTGGT GCACAAGTTG GTCCAAACTT CGAAGTATTA ACAGCGAGTA TTAGAATATG      180
```

ATTAAATGTT ATTCACTACA TGCACGATAA ATACAGCTAT GAACGTAATT GAAATGGCAT   300

TACATGATAC AnAAATTGTA CGTACAATGG CAACAGGTAT CGCTGGTTTA·TCAGTAGCAG   360

CGGACTCATT ATCTGCATTn AATATGCACA AGTTnAAACC   400

(2) INFORMATION FOR SEQ ID NO: 2934:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2934:

AAAATATGCC ATGACTGGCA TGACAAGAAT TGGACGTTAG AAGCATCTCA AACTGGTACG   60

TTCAGAGGTC GTAACTnTAA CTTCAATGGT GAAGGATTCT CACGTCAAAC ATTTAAAGTA   120

AATGCCGTTA GTCAAAAAGA CTACGACAAA TGGGTGAAAG AAGTTAAAGG TAAGAnAACG   180

TTAGATCAAG ATACATTTGA TAAACAATTA TTACCAAGCA CACCTAATAA AGCTTTAGAA   240

TTTAATGGTA CACATATGGC GTTTGTTGAT CCAGCAGCCG ATCCAGAATA CATCTTCTAT   300

GCATATAAAC GTTTCAATTT CGGATTGAAG GTCCCAAACT TCACTAGTGA GGAAAATATG   360

TTTAAGGTGT ATCAGACAAA CCCTTAATAC CTGCTCGTGA   400

(2) INFORMATION FOR SEQ ID NO: 2935:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2935:

ATGGAGTATA CAACTACTTC GGCATTGGCG CTTACGACAA CAATCCTAAC TACGCAATGA   60

CGTTTGCAAG GAATAAAGGT TrGACATCTC CAGCAAAAGC AATCATGGGC GGTGCTAGCT   120

TCGTAAGAAA GGATTACATC AATAAAGGTC AAAACACATT GTACCGAATT AGATGGAATC   180

CTAAGAATCC AGCTACCCAC CAATACGCTA CTGCTATAGA GGGTGCCAAC ATCAAGCAAG   240

TACAATCGCT AAGTTATATA AACAAATCGG CTTAAAAGGT ATCTACTTCA CAAGGGGTAA   300

ATATAAATAA AGAGGTGTGT AAATGTACCA AATAAAAGAT GTGAAACGAG AATTAAAAAT   360

GATGGTGTTG ACTTAGGTGA CATTTGGCTG TCGTTTTACA   400

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 400 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2936:

```
AAACAATACA AACAAAAGAA AGTCAACCAA GGATGGATTC CTATTTTAAT CCTTGGTTGA          60

CTCTTATTTT ATTTAAATTG TAGAACCTAG AAAATAAAGT TTAATTAAAA GCACCAATCA         120

TTTCTACTTT GAAATCTAAG GTTTCTAAAA TAGCAATGAC TTTCTTTATA TCGGTTGTAA         180

TTGCAGAATC AGCCTGAACG AAAAATCGAT ACATACCTAA TTGTGTTTTT AAAGGACGAG         240

ACTCAATCCA GGGTAAATTA ATATTAAACA AAGCAAATGT ATTAAGCACA CTTGCTAACA         300

ACCCGGGTTA TCATGCATTG GTGTAATTAA AAACATCAAT GGTGTCGCAT TTTGATCAAA         360

TGCTGCTGAT TTTTTATAAC TAAAAACGTG TCAGGTATGT                               400
```

(2) INFORMATION FOR SEQ ID NO: 2937:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2937:

```
TTATTATCTT GATACATTGA GTGTATATTC CATTTTCCAT GAGGCGTTAA ATAACGCATA          60

CCAAAGCATC TGTACCACCT TTAATTTTCT TATCTCTATT CCCAAATACC ATTGGCGGCA         120

ATGTCGGTTT ATATACTGGT AAGCTCTCCC CAAATTGTTG GAAAACTTCG TGATCCACAT         180

AATAACTTTG GACGTCCTGT TAATGTTCTA AAAGGTACTA GACGTTCTAT ATTCGTTGTA         240

AATGGTGGAA TATCGTCGAC CTTGTTTATT TGAACCGGGG AATACTGCTG TCGGTATTAC         300

TTCTCGTGGT TGTGGAAGTT ATATTTAAAA ACGGAAATTT TCTCAGCAGC GnTTTCGTTA         360

GGAAATATCT TTTAACGGGC ATTCCAGTTT GTTCnTCGGG                               400
```

(2) INFORMATION FOR SEQ ID NO: 2938:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2938:

```
TATCTCTTAA AGCCGGTGAT GGTGGTAATG GTATTACCGC ATACAGAAGA GAAAAATATG      60

TACCATTTGG TGGACCAGCT GGCGGTGACG GTGGTAAAGG TGCTTCAGTC GTATTTGAAG     120

TGGATGAAGG TTTAAGAACG TTATTAGATT TTAGATATCA ACGTCATTTT AAAGCAAGCA     180

AAGGTGAAAA TGGCCAAAGT AGTAATATGC ATGGTAAAAA TGCGGAAGAT TTAGTATTAA     240

AAGTTCCACC TGGTACAATT ATTAAAAATG TTGAAACAGA CGAGGTTTAG CAGATCTTGT     300

TGAAGATGGT CAAAGAGCTG TAGTAGCGAG GGCGGTCGAG GTGGCCnAGG TAATTCACGT     360

TTTGCAACAC CTAGGAAACC CTGGCACCTG GACTTCATGG                          400
```

(2) INFORMATION FOR SEQ ID NO: 2939:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 384 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2939:

```
CTAACCTCGA GTTCGTATTA TGCCCACCAC ATGTCTGCTG GCTTGTCGTA AATATTAACA      60

GATTTCAAAG TTTGACAAGC TTTTTGGAAA CCTTCTTCTA CTGACATAAT AGGATCTTCA     120

TGTTCAATAC TTAATACATA ATCATATCCA TTAATAATAA GTTGACTTAT GATATCTGCC     180

CATACATATG GACTATGTCC TAAGCCAACT GTACGGAATG TCATGCTCTT GTCGCAACGT     240

TACCATATGG TTGCATATCA GTTAGACCAT ACATATTTAC ATTTTCTTGG ATTAATATAC     300

GTATCTTTAG CATGGAAGTG ATGAATTGCA TTTGCTTGGn CTAATATGCG AATCGCAGCC     360

AATTGGGTCA ATAnCnTGGC CACC                                           384
```

(2) INFORMATION FOR SEQ ID NO: 2940:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2940:

```
TTTCATATTT TTCTATTAAT GATTCATATT GTAGGGTGAT TGCAATGTCA TCTAAGCCAT      60

TTACAAGTTT ATTCTTCCAA GTTTCATCAA TTTCAAAATG GAAACGCTTG TCTGGTGATG     120
```

CACTTTTTTC TAAAACGATA GGCAACATCG CATTTTTAGT GCAATTCATA TAAAATATGT   240

CACTGAAACT TCCTGCAATA ATAATATGAA AACCATAGTC CTTAAGAGCC CAAGCAGCAT   300

GTTCACGACT TGAACCACAT CCAAAATTAT CTCCAGTnAT TAAATnGGAG GCCCCTTTAT   360

ATTGTGGTTT GTTAGGGTTG AATCAGGGTT TnTnGGAACC   400

(2) INFORMATION FOR SEQ ID NO: 2941:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 409 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2941:

ATCATAATCC ATCGTGCGTC CAAGAAGTAC TTGATTATTT AAAGTTTGTA TTGTGAATCC   60

TGTGCACATT GTTCTCACTC CTCTGTACCT TCATTTACTT TAATCACTTT CAAATAAAGC   120

TGTTTCACTT AAACATACTA TAAAAAATCA ATTATACAAG CAATTAATTG ATATTCATTC   180

TCAATAACTG TGGTATGATA TGTAAGGAAA TCATGACTTA TGTGTGAGTG AACGATCATC   240

TATACATCCG TTCACTTCAT CTCATGACTT TCTATATTTA ATTTTTACAA GGgAGTGACA   300

TCTGTGAATa ACACACAATC TTCACCACGC gTAaTaTtAT TaTTGCGATT ATGTTGTCTG   360

CATAACATAT GGTTGTTGCA CAATCATTAT TAnTATAGGA CCTCCGTTG   409

(2) INFORMATION FOR SEQ ID NO: 2942:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2942:

ATGAAGTGTC AAAAGGTTTA AAAACATCTG AAAGGGGTTC GCACATGTTT TAAACTTTAA   60

AAATAAAGGT GGATGTCCAA AATGTCGACC AGCAATCAAC TATTATTTAA ACATGGTTTA   120

TCCACATGAT CATGAAGATG AAAGAGAATC AAGATTTGCT AACGAACGTT ACCATGCGAA   180

TATTCAAAAT GATGGTACAT TTTCTGTTAT ACCTCAAATG CGTGGGGGTG TTACAGATGC   240

AGACCAACTG ATTCGTCTAG GAGAAGTGGC TAAGAAATAT CATGTGCCAC TAGTTAAAGT   300

GACAGGTTCA CAACGTGTTG GTTTGTATGG AGTTAAAAAA GAAGATTACC AAATATATGG   360

(2) INFORMATION FOR SEQ ID NO: 2943:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2943:

```
ACCTGGAAAT GTATGTGCCA TCTCTTTAAG CCAATCAGTA TCTTGAATAC CTTTCGTTCC    60
AACTATGCAA TAATTAATCC CTGCGGCAAA GTAGTCCATG ATTGTGACTT CGTACGAATG   120
CCACCACCTA CTTCAATATC TTTGGTTGTT AATCTCCTCA ATGACTTAAT ATAATCAAAC   180
TCTCGGGCAT GCTGTGCCTT AGCACTCATC AAGTCGACGA TATGAATACG ATTCACACAT   240
TCAAATTGAC TATAGTAAGC AATACTTTCT TCAGCCGAGC GTGGACATTT TTTCTTCACT   300
ATCATATTTA CCCTCTGTTA ACCTCACACT TGTTGACCCA ATCAAATCAA TCGCTGGGCC   360
ATAATTCAAT CATTTnATAA ATCCCCCTTG TATTGGCCTG                         400
```

(2) INFORMATION FOR SEQ ID NO: 2944:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2944:

```
AACAAAAGGG GTCTATCGTC AATCGTTTCT TGAATAGTGT TGAAAAAATC GGAAATAAAT    60
TGCCAGATCC TAGCGTCTTA TTCTTTTTAA TGTGTGTGGG CTTAGCCATT ATGACATGGG   120
TTATCTCATT ATTTAATGTA TCTGTTAAGC ATCCAGGTAC GCATCAAACC ATTTATATTA   180
AAAATATAAT TAGCCATGAT GGATTTACGA TGATAATGAA TGATACGATT AAAAATTTCT   240
CAGAGTTCCC AGCATTAGGC TTAGTACTAG CAGTGATGAT TGGTATTGGT GTTGCAGAGA   300
AAACAGGATA CTTCGATAAG TTAATGATTT CTGTTGTGAA TCGCGCACCA CGTTTCTAAA   360
TTTACCGCTA TAATATTAAT GGGnATTTTA GGGAGTCAGA                         400
```

(2) INFORMATION FOR SEQ ID NO: 2945:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2945:

```
ATTTTACAAG TAACGGTGCA TCACCAGATT CTAATTTAAT GTCATGCTCA GCAGCATTTT        60
GATAACCCAA CTTTTCAAAG TAGTCAAAAC AATGGTCTAC AACAACCGTA CTATACTCTT       120
GTGCTTTGGC CGCTCTTCTA CTGCTTGAAC CAAGCCACGA CCTAATTTTT GTCCACGTAA       180
TTCAGGATGA ACTGATAAAG AGGCAATCGC CAAACCATAA TACGTCTTAT CATCACTATT       240
AATTTCTACT TCAATTAATA AAACGTGTCC AACGACATCG TTATTTTCAT TTTTCGCTAT       300
TACTTCTAAT TCAAAATTAT AGCAAGGAGA TTTTCTTAAA TGGTTTACTT TCGGCACGTG       360
CCTGGCCAAC TCGTTTTCAG GATTATCATC CAAACTTTCC                             400
```

(2) INFORMATION FOR SEQ ID NO: 2946:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2946:

```
GGAAATAATT ACTTGAGCTA GATAAGTTGA CAGCTGTGCA ATTATTTTCA GCAGCTAATT        60
GTAAAATTCG CTCTAATCTT GCTGATGAAT GTTCAGGCCC TTGACCCTCA TATGCATGAG       120
GTAAGAATAA TGTTAATCCT GAACGTTCTC CCCATTTTGA GCGAGAACTG AATAAGAAGT       180
TGTCAAAAAT CATTTGTGAC ATATTTGGCA AAATCACCAT ATTGTGCTTC CCAAATATTG       240
AAGCTTTTTT TGTTTTCCAC ATTATAGCCG TATTCAAAAC CAACTACTGC TGCTTCTGAA       300
GCGGAGAATT GTGTATATCA AATGTCGCTT TTTGAnCAGG AGCATGATGT AAAGGTGTAT       360
ATGTTnCACC nGTTTGCTCA TCATGTnACA CGGCAGCCGT                             400
```

(2) INFORMATION FOR SEQ ID NO: 2947:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2947:

```
AAGTGGCATA AAAAAATCAC ATGACGATAC ATTGTCGTCA TATGACTTTA AATATTATTC        60
```

2378

TTCAATTGTG TCACCGATTT TTAATACATC TTCCACTTTT TCAATTCTAT TTTTTGAAAT   180

TTGTGAAATG TGAAGCAACG CATCTTTACC TGGGAATAGG CCTACAAACG CACCGTATTT   240

TTCAATACGT TTAACAGTGG CTTGGATAAG TTTGACCTAC TTCCGCTTCA CGTGTAATTT   300

CCTCAATGAT TTCACGAGCA CGATTTATCA TAGCTTGATC AACAGCACCC ATAAAGATAG   360

TACCATCCTG GnCCATATCn AATTTAACAC CnGGnTCCTC   400

(2) INFORMATION FOR SEQ ID NO: 2948:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2948:

TTTTTCAAGT TTTGCTGAAG GCTTTACACA AGGCTATTTA ACAATGGATG CCATTGCAGC   60

AATTGCTTTT TCAATGATTG TTGTTAATGC AGTAAAACTA ACAGGCATTA CTAAAACAAA   120

TCAAATATTC AAACAAACTT TGACTGCTGG TTTAATTGCA GCCGTAGCTT TAATTTTCAT   180

ATATATTTCA TTAGGTTATA TTGGTAATCA TATGCCAGTA AGTGACATGA CGTTAGATCA   240

ATTGAAATCC AAAGATCGAA ACATTGGGAC ATATTTATTA ACGACAATGG CTTCAACAGG   300

ATTTGGTCAT CCGGAAAATA TTATTGGGCA TCATTGTGGC GCTGGCATGC TAACTACAGC   360

ATGCGGGCTA TGGTGCAGTT CCTGAATATT CCATAGATCG   400

(2) INFORMATION FOR SEQ ID NO: 2949:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2949:

CATGGCTTCA GATTGTTTGA ATTGAATGGA CAATTTTGGn TTCTGTCCAA AATTCTTACA   60

AAATCTTCTA CCGATAAACT ATCAAGTTCA ACTCTAATCG GAAAAACGAC CTTGCAATTC   120

TGGTATCAAG TCACTCGGCT TAGATACATG GnAAGCTCCA GCACCTATAA ACAGCATATG   180

TTCAGTATTC ACAGTACCAT ATTTGGTTTG AATAACGCTA CCTTCAAGTA TAGGTAAAAT   240

ATCTCTTTGA ACACCTTGTC TTGAGACATC TTGACCACTA TTATGATTAT TCGTCGCAAC   300

GTTAGCGCTT TCTTGATCAn TTAGTTCATC CGCATAACTA   400

(2) INFORMATION FOR SEQ ID NO: 2950:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2950:

TTGACTTTGT AACTAAACTA CTCACTCGAC CGACTCAACT GTTTAAATGT TTCAGATGGT   60

TTAACTCTAA ATACTACGTA TAAATCACCA GCAGGTCCTC CATTCACGCC TGGAGAGCCT   120

TCACCAGCTA ATCTAATTTG TTGTTCATTG TCGACACCTT CAGGTACTTT CACTTCTAAT   180

TTAACTGTTT TATTTTCAGT ACCTTTTCCG TGACATGTTG GACAAGCTTC TTCAAATTCT   240

TGACCACTTC CATTACATTT AGGACAAACT TGTTCAGTAC GAACTCTACC TAAAATTGTG   300

TTTTGTTCTA CAGCTACATG ACCAGCGCCA TTACAGTAAC TACAAGTCTT TTTACTTGTT   360

CCAGGCTTTG CACCATCACC ATGACATGTT TCGCATGTnA   400

(2) INFORMATION FOR SEQ ID NO: 2951:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2951:

CAATGATTTT AAAAGATGCA ATAAAACCAA ACTTAGTACA ATCAATTGAA GGGACACCTG   60

CATTAGTTCA TGGTGGACCA TTTGCGAATA TCGCACACGG TTGTAACTCA ATTTTAGCAA   120

CTGAAACAGC ACGTGATTTA GCTGATATCG TTGTAACGGA AGCTGGATTT GGTTCAGACT   180

TAGGCGCTGA AAAATTCATG GACATTAAAG CGCGTGAACA GGATTTGATC CGGCAGCTGT   240

CGTTGTTGTT GCGACAATTC GTGCGTTAAA AATGCATGGT GGTGTAGCGA AAGATAATTT   300

AAAAGAAGAA AATGTAGAAG CAGTAAAAAG CAGGAATGGT TAATTTAGAG CGTCATGTTA   360

ATAATATTAA CAATTCCGTG TAGAnCCGGT TGTTGCCATA   400

(2) INFORMATION FOR SEQ ID NO: 2952:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs

        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2952:

TCAAGTAGCA AAAGAAACAG GTGCTTCAGT TATCGGTATT GATATTGGTC CACAAGCCGT   60

TGACCTAGGG CGCAGAATCG TTAACGTCTT AGCACCAAAT GAAGATATAA CAATTACGGA   120

TCAAAAGGTA TCTGAACTTA AAGATATCAA AGATGTGACG CATATCATAT TCAGCCGACA   180

ATTCCTTTAA AGTACAGCAT TTTAGAAGAA TTATATGATT TAACAAATGA AAATGTCCGT   240

AGTTGCAATG CGCTTTGGTG ATGGCATCAA AGCAATATTT AATTATCCGA AGAAACAGCG   300

GAAGATAAGT GGGCCATGTG TGAATAAACA TATGAGACCA CAGCAAATTT TTGATATAGC   360

ACTTnATnAA AnAGCCGGCT ATAAAGTnGG TATTACGGAT   400

(2) INFORMATION FOR SEQ ID NO: 2953:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2953:

CGCAATTCAC AATAACATTA AATAATTTTT GGTCTCATAT TTTCAAAAAA CATACTGTTA   60

TTATCCCATG GGnTTAAAAA TATCATTAGT ATATAAACGA AACACTTTAC GATAAATGAT   120

ATCTGCAAGC CAAGCTGTTA CAAATGGTAC AACAAAGAAC GCTACTACAA TTAGTAAGAC   180

ACTCAACCAA GCAGAATCAA CCTCCATAAA TTTAAATGCA TTAATCGGTC CTACCATTCC   240

TATAAAACCA AATCCAGCTG ACTCTTTCGT TCCATGAATA CCTACTAATG CTGATACCAA   300

ACCTGATACA ATGGCTGTCG TAnGGGCGGG GnGCATAAGA ATTGGATATT TCACCATATT   360

AGGTATCATC ATTTTAACGC CTCCAAAGAA GACCGGATAA   400

(2) INFORMATION FOR SEQ ID NO: 2954:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2954:

```
AACACTTTAA TGGAGATTTA GCAGGCACTG TTACACTGAC AGCAGGTTTA GGTGGTATGG        120

GTGGTGCGCA ACCGTTAGCA ATTACTATGA ATCATGGGGT AGCAATTTGC GTGGATGTTG        180

ATGAAACACG TGTTGATAAG CGAATTGATA CGAAATACTG TGATGTTAAA ACAGCTGATT        240

TAGATGAAGC ATTAAAATTA GCAGAAGAGG CGAAAGAACG TGGGAGAAGG ATTATCAATC        300

GGGTTAATTT GGAAATGCTG TAGACATCCC ATCCAAGCGG ATTCTAGGAA AAAGGGTTTT        360

AAAATTGGAC ATTAATTACT GGnCCCAAAC CAAGTGCCCC                              400
```

(2) INFORMATION FOR SEQ ID NO: 2955:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2955:

```
TTCAGAATAC GAGCAATGTC AGTTGCAGTG TTAATAAAT TTTGTTCGCT ATTTTGTAGG        60

CATCTTCTAA AGTGCTAGGT GAAGAGATTA TAGAATAGGC ACTATCAATA CCGAAATCGT        120

AAACATGTTG ATAATTTTCG CCTAGACTGC CACAAATCGC GATGACAGGA ATATGATATT        180

GTTTTGCAGC TAACGCAACG CCTACGGGTG TTTTACCAAA GATGGTCTGA TAATCCATGC        240

GTCCTTCTCC AGTAATAACG AGGTCTGCAT CTTTAATTCT TTGATGAAAA TCTGTAATGT        300

CAAAGACGAC ATCAATACCT TTTGTTAAAG TTGTCTCACA AAACGnTAAT AATGCTGCGG        360

CCATACCGnC AGTGCACCAG AACCTGGTAT TTGGTTnACG                              400
```

(2) INFORMATION FOR SEQ ID NO: 2956:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2956:

```
AATACGTCCT TTATATAATG TTAATAACCA GTTAAACAAT TTCACACCAG TTGGAATACC        60

AATCAGCATT GTTGAAATTG AGAAGAATGA GTTGATTAAC GCACCATTAC CCATTGTGAA        120

GAAATGGTGA ACCCAAACTA AGAAACTAAG GAACGCGATA CCGGCAGTTG CCCATACCAT        180

ACTTTGATGT CCGAATAAAC GCTTACGAGC GAATGTCGGG GATAATTTCT GAGTAAATAC        240
```

CCAAAGCATT GGGCATACCG CCATGTGGCA CTGTGGAAGA ATGCTGTGTC CAATATTCCG   360

nTCATTGGTn CATTAATGGC TAACGCTAAC GGTTTAAAGG   400

(2) INFORMATION FOR SEQ ID NO: 2957:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 394 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2957:

TAGTAATTAA TACGATGTCA GCACCTACTG ATTTTGCTTT GTCTGCTAAT AATCTTAAAT   60

GTTCCGTGGA CCTGAACCAG AGATAATTAC AAATACATCA TTCGACTTAA TCGCAGGTGT   120

CGTTGATTCT CCAACAACAT GTGCCTGTTT GCCGAGCTGA TTTAAGCGCA TTGCAAAACT   180

ATTCGCCACG AATCCTGGAA CGTCCTTTGC CAGCTACAAA TATATGTTCA GCATGTAGTA   240

TTTTGGGATG CAAAAGTTGG AAAACTCCAT CCGnTTCAAC ATGTGACAAA GTCATCTTTG   300

AATTCATCTA GAnTTAATTG ATAGTCACTA AnTTTAGCCA TATTACTTAC CTTCGGTTGC   360

CAGCGCGACC ATTGTTTCGC AGCTTCTTAC TGGG   394

(2) INFORMATION FOR SEQ ID NO: 2958:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2958:

AATTATTCTA CCTATAATTA AAAATGCTGG CAAAGGTGTA ATGATGATGA GTAATGAACC   60

TACAACATTT AATATCAATC CTACATAAGT AATTTTGACG CGACCAAATT TATCAGCAAC   120

ATCACCAGCA CCTACGATAA ACAAACCAGC AAATAAGGCA GATAAGCTAA CAGCGATTAT   180

TTATCGTTCC AACGTCACTA CTATATGTTG ATTGTAATGG GACAACAAGA TTAACAAGTG   240

ACTGCGCGAA TAGCCAAAAG GTAATAACCC CTAAAACGAT ACCCAAAnGC AATCGGTTGT   300

TCACCTCTTA AATTGTTTTG ATGTGTCCnT GGATTAGGAT AAGCCTCCTA TGTTTAGGAA   360

AAACAATTTT TAATATGGTA TATTAAGGAn ACATTTCCTT   400

(2) INFORMATION FOR SEQ ID NO: 2959:

        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2959:

CTTCTTTCTC AACATCAAAG AACATATGGT TTTGTTTCAA ATATTCTTTT ACTAGCGCGA   60

TATGTTCGTC TGATCTACCA GTTAACTTCA TATATTTAAG AGATTCATCA TCAACTGGGA   120

AGAATCCGCA AGTTGCTCCA TACTCTGGTG CCATGTTTGC AATTGTAGCA CGGTCTGCTA   180

GTGGTAAATG TTGTACACCT GGACCAAAGA ACTCCACAAA TTTACCAACA ACACCTTTTT   240

TACGTGGCTC TTGAGTTACT CTTAACGCTA AATCAGTTGC TGTTGCGCCT TGTGGTAATG   300

AATTTACTAG TCGTACACCA TTAACCTCTG GAATTGGGGA AATAGGAGGG TTGTCCAGGC   360

ATTCCAGCTT CAGTTTCAAT ACCACCAACA nCCCTCCTAG   400

    (2) INFORMATION FOR SEQ ID NO: 2960:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 380 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2960:

ACGTCAAATG TAATCACAAT CGGAAAGTAT CGTGACAATG CATATATAAC AGGGAGGGTT   60

TAAATATGAG TTACTAAGGG GATTTTTAGA TTTAGGTGCA CTGTTTATTT TACCGGTTGT   120

CATATTCTTG CTTGGCCTAT TCTTTAGGCA GAAAATTGGA GCGGCATTTA GGTCTGGTTT   180

AACAATAGGT GTGGCTTTTG TAGGGATTTT CTTAGTCATC GATTTATTAG TTAAAAATTT   240

AGGGCCAGCA GCACAAGCGA TGGTTAAAAA TTTAGGCGTC AnTCTGAATG TGGATTGATG   300

TAGGTTGGCC AGCAACATCA TCTATCGCTT GGGCATCATC TGTnCGCnCC ATTTTATTAT   360

TCCACTCGGG ATTCATAGTT   380

    (2) INFORMATION FOR SEQ ID NO: 2961:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 358 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

GGCCATTGGT CGAACTTACG AAGAATCATT GTTAAAAGCA ATTCGATCAC TTGAGTATGG   60

TGTGCATCAC TTAGGATTAC CAAATGGTGA AAGCnTCGAT CTTGATTATA TTAAAGAACG   120

TATTTCACAC CAAGATGATG GACGATTATT TTTCATCGGC GAACAATTAG AAGAGGCACA   180

ACAGTAGAAG AAATTCATAA TATGACTCAG ATTGATTACT TCTTCTTACA CAAGTTCCAA   240

AACATTATTG ATATTGAGCA TCAATTAAAA GAGCATCAAG GTGATTTAGA ATATCTTAAA   300

TATGCnAAAG ATTATGGnTT TAGTGGTAAA ACAATAGCGC ATCGCCTTAA TATGACGG   358

(2) INFORMATION FOR SEQ ID NO: 2962:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 364 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2962:

TTTGGGCATC ATTAGGAAAA TTCTTTGAGC AACTTTAGTG TCTACTGGGT AATACAATTT   60

TATCACCATG TTTTTCTAAT AAATCTTTTG CGAATCGATT TTATCTTCTT CTAATAATGA   120

AATACCAATT TCTTTACCTT GCGCTTTTAA GAAAGTATAA GCCATACCTC CGCCGATGAT   180

AATTTTATCA GCTATGTTAA CTAAGTTTTT GATGACATTA ATTTTGTCAG ATACTTTTGn   240

GnCACCTAAA ATAGCAACAA CTGGTTTATG TGGATCGTTA ACTACGCCGC CAATAAACTT   300

AATTTCTTTA TCCATTAAGA ATCCAGCTGC AGTTCTAAA TGTGTAGAAA TACCAACATT   360

ATTn   364

(2) INFORMATION FOR SEQ ID NO: 2963:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 372 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2963:

GTTGATTTCT TGAAAGATAA TAAAAAATTC AAAGAAATGG GATCTAGGAT TCCTAAAGGT   60

GTCTTACTTG TTGGACCTCC AGGTACTGTT AGAAACATTA CTTGCTAGAG CGGTTGCAGG   120

TGAAGCTGGC GCACCATTCT TCTCTATTAG TGGTTCAGAC TTTGTAGAGA TGTTTGTTGG   180

TGTTGGTGCG AGCCGTGTTC GTGACTTATT CGATAATGCT AAGAAAAACG CGCCTTGTAT   240

```
TCATGATGAA CGTGGAACAA ACCCTAAACC AnTATTAGTT GAAnGGATGG TTTnCGGTGG          360

AAAATGAAGG TG                                                             372
```

(2) INFORMATION FOR SEQ ID NO: 2964:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 382 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2964:

```
TTAGCAGAAC GCCCACAAAA CCTATCTCTT GCTGTAAAAG AATTTGTGAA nCTGCTGGCT          60

TAAAACGTGT TGGCATAATT GCAGCTTTAG GAGCTACAGT TATGTTAGGT TTAAGTACAA          120

TTAAAAAATT ATGCCGTAAA TAGAGCAAGA CATAAACAAT AATTTAGGAG TCTGGAACAA          180

TAATCAATGT TCTAGGCTCC TAAATGTTAT ATTGGCAGTT CTGAAACATT TATAAATCTT          240

TGATTATGAA CTCACAACAG TGCTCTATGC TTTTATAGAT TTTAATAAAT TAGCCATTTC          300

AATTGCACTT ACTGCTGCTT CACACCCTTT ATTGCCAGCT TTCGnACCTG CnCCTTCCAC          360

AGCTGGGCAA TACTGCCAGC CG                                                  382
```

(2) INFORMATION FOR SEQ ID NO: 2965:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2965:

```
GGGAATCATA CAATCATTAC CAATAAACAT GTTACTTATC ACATGAAAGT CGGTGATGAA          60

ATCAAAGCAC ATCCTAATGG TTTTTATAAT AACGGTGGTG GACTTTATAA AGTTACTAAG          120

ATTGTAGATT ATCCTGGTAA AGAAGATATT GCGGTCGTAC AAGTTGAAGA AAAATCAACG          180

CAACCAAAAG GTAGAAAATT CAAAGATTTC ACTAGCAAAT TTAATATAGC ATCAGAAGCT          240

AAAGAAAATG AACCTATATC AGTCATTGGT TATCCAAATC CTAATGGAAA TAAACTACAA          300

ATGTATGAAT CAACTGGTAA AGTACTATCA GTGAATGGAA ATATAGTGAC ATCTGATGCG          360

GTTGTCCAAC CTGGCAGCTC TGGTTCACCT ATATTAAATA                                400
```

(2) INFORMATION FOR SEQ ID NO: 2966:

```
        (A)  LENGTH: 400 base pairs
        (B)  TYPE: nucleic acid
        (C)  STRANDEDNESS: double
        (D)  TOPOLOGY: linear
```

```
        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2966:

TGGGGATTCA CAGGCTAATA CATTTGACTT TATTAGCTGG TGGCGGTAAC GGCGCTGAAC          60

TTTAAATGCG ATTCAAAGTG CTGCAATTAT AAGTGCATTC CCATTCTCCT TTGTCGTCAT         120

ACTCATGATG GTAAGTTTCT ACAAGGATGC GAACCAGGAA CGTAAATTCC TAGGTTTAAC         180

ATTGACTCCG AATAAACATC GCTTACAAGA ATATATCAAG AGTCAACAAG AAGTTATGAA         240

TCTGACATTC TTGAAAAGCG TCAGTCACGT GAAATATAGA GAAAAAGAT AACTAATAAA          300

GTTTAGTTAA GTATTTTAAT AACAAGTAGT ATGTCATTCT AGTAGCTAGA ACGGTnATAC        360

TACTTGTnTG TTTTTGTGGA AATTGAGTAT TTCAAAGGTT                               400
```

```
   (2)  INFORMATION FOR SEQ ID NO: 2967:

        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 387 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear
```

```
        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO: 2967:

ACGAGGAATT AGTGAAGTAC AATATTATCG GTGGTTTTGA TTTAGGTGTT GTTTCAGACG          60

ACTTTAAAAA TCACATGTTA ATAGCTGTAA CTGAATTAAG AACAAAAGAT GAAATCGATA         120

CATTTGTAGA AAAGGCTGGT GAGTTAAATG ACTAGTAAAT CAAGTCCATT AATTTTTGAA         180

AGATCTCGTG AAGGCAGATA TGCATATTCA TTACCAAAAA GTGATATTAA AACAAATTCT         240

GTTGAGTCAT TGTTAGATGA TAAATTTATT CGTAAAAACA AAGCGGAGTT TCCTGnAGTT         300

GCTGGAACTA GACTTnGTAC GTCATTAATC CTGGACCTTT CCAAATAAAA AATTCCGGnG         360

GTAGACACCG GGTTTAACCC ATGGGGT                                            387
```

```
   (2)  INFORMATION FOR SEQ ID NO: 2968:

        (i)  SEQUENCE CHARACTERISTICS:
             (A)  LENGTH: 806 base pairs
             (B)  TYPE: nucleic acid
             (C)  STRANDEDNESS: double
             (D)  TOPOLOGY: linear
```

```
AACAAGTGCA AGTGAGTCAA CATCAGAAAG TGCGTCAACA TCACTCAGTG ACTCAACAAG        60

TACAAGTAAC TCAGGATCAG CAAGTACGTC AACATCGcTC AgTAACTCAG CAAGCGCAAG       120

TGAATCCGAT TTGTCGTCAA CATCTTTAAG TGATTCAACA TCTGCGTCAA TGCAAAGCAG       180

TGAATCCGAT TCACAAAGCA CATCAGCATC ATTAAGTGAT TCGCTAAGTA CATCAACTTC       240

AAACCGCATG TCGACCATTG CAAGTTTATC TACATCGGTA AGTACATCAG AGTCTGGCTC       300

AACATCAGAA AGTACAAGTG AATCCGATTC AACATCAACA TCATTAAGCG ATTCACAAAG       360

CACATCAAGA AGTACAAGTG CATCAGGATC AGCAAGTACA TCAACATCAA CAAGTGACTC       420

TCGTAGTACA TCAGCTTCAA CTAGTACTTC GATGCGTACA AGTACTAGTG ATTCACAAAG       480

TATGTCGCTT TCGACAAGTA CATCAACAAG TATGAGTGAT TCAACGTCAT TATCTGATAG       540

TGTTAGTGAT TCAACATCAG ACTCAACAAG TGCGAGTACA TCTGGTTCGA TGAGTGTGTC       600

TATATCGTTA AGTGATTCGA CAAGTACATC AACATCGGCT AGTGAAGTAA TGAGCGCAAg       660

CATATCTGAT TCACAAAGTA TGTCAGAATC TGTAAATGAT TCAGAAAGTG TAAGTGAATC       720

TAATTCTGAA AGTGACTCTA AATCGATGAG. TGGCTCAACA AGTGTCAGTG ATTCTGGCTC       780

ATTGAGCGTC TCAACGTCAT TAAGAA                                            806
```

   (2) INFORMATION FOR SEQ ID NO: 2969:

       (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 351 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2969:

```
ACCATCTACT CCGTTAATAG TTACACTGTT ATCATTGGTG TTTGGACTTT CAGCCCTTGC        60

ATCTAAAAAT ATAAGCTGAT TAAAATCTGT TATTACTTCT TCCTTGTAAC CATCTATGAT       120

TTTTACAAAA GATTGCATTA ATTAGTCAAA CCTCCCATAT AATTATTTGC ATTTGCTCTA       180

TGCCCACTTT GTTTTGACAA TATTTTTTCT AAACCTCTAA TTGCATCATT AGAACCTAAG       240

GATTATCCTG AGAAGAAACA GTTTGAATCA ACGCATCTGT TAATTnATTn CCTTTATCAC       300

TTAACATAAC AATTTGGTTC AACAATTTnC AACTGTAGAA GTATCATTAT T               351
```

   (2) INFORMATION FOR SEQ ID NO: 2970:

       (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 359 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2970:

```
AGTGCTTGAT GAATTTTGAC CACAAATTCA AATGTATCAG GCGTTTCTTT TATCCATTTC      60

AATATATTTC TTTCCGGTTG TATCGCATAG TATGTCGCAT CTAATTCGAC AACCGGAAAA     120

TGTCCAGCAT ATGTTTTAAG TTTATCGGTT TGGCGTTCTA AATCTTCATA TAATGAATAG     180

TGATCACCCC AACCTGTTAA TCCGATGTTT ATCATATATA TCACCAATGT CATCATACCA     240

TATAACTTTT ATCATAATCA TTTCAGCGAA CTTTAGTTTG ATGTTTTTGC TTGATTAAAA     300

TCTTTTCGGC GAnCCTCAGC TTGATGTTTT TCGTTGATTA AATGGTAAAT AGnnACGCA      359
```

(2) INFORMATION FOR SEQ ID NO: 2971:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2971:

```
CAGACGGTCA AGAATCTTAT ACTTATCAAA ATTTATACTG TGAAGCGAGT CTATTGGCTA      60

AAAGACTCAA GGCTTATCAA CAATCTCGTG TTGGGCTATA CATAGATAAT TCGATTCAAT     120

CGATCATTTT AATACATGCA TGTTGGTTGG CAAATATTGA AATTGCGATG ATTAATACAA     180

GGTTGACACC TAATGAGATG ACGAATCAGA TGAAGTCAAT CGATGTACAA TTGATTTTTT     240

GTACCTTGCC ACTGGAATTA CAGGGTTTCA AATTGTATCG CTGGGTGATA TTGAATTCGC     300

TGGAGGGATA TTACAnCGAn CAGTTGTTGG GCAACACAAT GGGTATCCAT TTGAACCATC     360

GGATGnAACT TTGTGCCGAA GGTCGCCTCC ACATnTAATG                           400
```

(2) INFORMATION FOR SEQ ID NO: 2972:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 392 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2972:

```
TCAACCGCTT TACAGCCAAC CGGCGACGCT GACATGGATC GCCTGGCCCA TGCCCACGCC      60

TTGGCGCCAT CATTATTAAT TGCTGCAGTT ACGGTATCTT TAATTGCGTT AAATAAACCT     120
```

```
AAATCACCGA AATGTTATTC GCTTAACGTT TTGTTGTTGT TATTTTAAAA TAAATTTGAT       240

GCAATTAGTT TGTTTATCCG CACAACATCT TATAATGTAC TTAACTGTAT·TTTAAAGAGA       300

AAAGAAATAC AGTTAGGCAT TCAAAACTGT ATTTAACACA ATTAAGTTGC CTGAATTCGT       360

ATTTAAGTCT TATTGAACCT TTTTnAGATA An                                     392
```

(2) INFORMATION FOR SEQ ID NO: 2973:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2973:

```
ATTGCAATGA TAGCAATCGG AATCGCACCT GCTAAAATAA ACGTTGTGCC ATCCGTCGCA        60

TTTGTACCAC GAATCACAAT GTCACCAAGC GTAGGTGCTC CTATAAATGA TCCAACGGCA       120

ACAACACCTA TCGCAACAAC CAAGGCAATA CGAATGCCAC CGATAATAAC CGAAACAGAT       180

AACGGTAATT CAATCATTCG TAGCACTTGA TTGCGTGTCA TTCCCATACC TTTGCCAGCA       240

TCCTTAATAT TCGCATCAAC ACTAGCTATA CCAGTATAAG TGTTTTTATA ATTGGAAGTA       300

ACGCATATAA AAACACTGTT AAACTACTGT TCTGAnCTAG CCTGACTACA TTAAATAGTn       360

ACATTGCATG ACTGGACTGn TGGATATATT GCATGGATnC                             400
```

(2) INFORMATION FOR SEQ ID NO: 2974:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2974:

```
GTATTCTTTA GGTAATGCAA CTTTTAATCC TTTAATATCT TTACCAATTT CAGATGTAAA        60

GTCTACATCA TCAACTGGTG CACTTGTAGA GTCATTAACA TCTGCACCAG AAATAGCTTC       120

TAATACGATT GCATTATCTT TTACATTTCG AGTCAATGGA CCAATTTGGT CTAATGAAGA       180

TGCAAAAGCA ACTAATCCAA ATCGAGATAC ACGACCGTAT GTTGGTTTCA TACCGACAAC       240

GCCACAATAT GGCAGCCGGT TGTCTAATTG AACCACCTGT GTCTGGAACC TAAGCTAAAT       300

GGTACTAAGC CAGCTGCAAC TGCTGCTGCA GATTCCACCT GAnGGAACCA CCTGGGCACG       360
```

(2) INFORMATION FOR SEQ ID NO: 2975:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 361 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2975:

```
GAGATCGCGG GTTCGATTCC CGTCGAGACC GTACAAATGC CTATCCAAGA GATAGTTTTG      60

TnTTGCGTTT AATATTATAT TAATAAAAGA TATATGGACG AATGATAATC ATATTGATTT     120

ATCTGTTCGT CCATTTTCTT TAAAATGTAT GAACCTCAAG TAACTTAGTG GTTGGATATG     180

AAAGATAAAC GTnGACAATA AAATCTTTAT TAGACGTACA AACATATGCT ACTGTCAACA     240

TATTTCTTCG TTGTGATATG CCACCAGTCC TCCATAACAT CAATTGTTAA AGTAACGAAT     300

AACGAATAAT GATATTTnAT TTCTGAGCCA TGACGTGCCA CTAGAAGTTG CCCATTATCC     360

T                                                                     361
```

(2) INFORMATION FOR SEQ ID NO: 2976:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 356 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2976:

```
TGCTGCTTCT GAAGCGGAGT AATTGTGTAT ATCAAATGTC GCTTTTTGAT CAGGAACATG      60

ATGTAAAGGT GTATATGTTT CACCTGTTTG CTCATCATGT AACACGGCAT GCCTATGACT     120

GAATGTACCA CGTTCACTAT CTTGACCAGT TAAGCGAATC GGTGTACCAT CTTGTAAAAT     180

TGTCGCAAAT GCAAGTnGTT CTGCTTGTGC CCAATCAACT AAACCATCTT CTTTATTAAA     240

CGGCTCATGA CGCTTCTCAA GAACTTTGTT TAACTTTTTn CAAAATGTTA AAGCCATCCG     300

GATATGTTAA CAATGCATCA TTATTTCTTT CAAGTGATCC AAAAGTAAAG GnTTGT        356
```

(2) INFORMATION FOR SEQ ID NO: 2977:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 371 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2977:

```
CTTTAGAGCG ACACCTAGTC ACTGCAGCAA GCTATTTCTT TATTTGCTAT. GCTATAnATC          60

GTTAATTACT AGACCTATTG CTGGTAGATT GATGGATGAT AAAAATGAAA ATATTATTGT         120

CTACCCAGCA TTTATCATGC TTTTCCTTTC ATTTGTATGC TTAATTTCAA GCTATCAAAG         180

CTGGTTAATA TTACTTGCTG GTGCTTGCCT AGGTTTAGGG TATGGAAATT TATCATCTGC         240

AATGCAATCT ATTGCGATAA AAGTCTCACC CCCGATTAAA TATGGTATCG CGACATCTAC         300

TTTTTACGTT GGTCTAGATG CCAGGTGTCG GCTTCGGTCC AGCATTCCTT GGGTTAnTTA         360

CGCAGnGTTT T                                                             371
```

(2) INFORMATION FOR SEQ ID NO: 2978:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 365 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2978:

```
TTGTAATTTC ATGATTACAC CTCAATTGTT CTTGTTGTTA AAACTCAATA TTTAATTGTC          60

TGCGCTCAAT AATTTGTTGT TTAAGTTGCT CAATATGATT TGATTGGAAT TCTTCCAATA         120

ATGCTTTTGC TATTTCAAAT GCTACGACAT GTTCGCAGAC GATACTTGCT GCAGGAACAG         180

CACAACTATC AGAACGTTCA ATTGTTGCTT TAAAGTCTTC TTTAGTATTA ATGTCTACTG         240

AATTTAATGG nTTATATAAC GTTGGAATTG GnTTCATTAC ACCATTACGA TAATTGGCAT         300

CCATTGACAT ACCGCCTCTA ACCACCTAAG TGATTAGAnC ACGATAATAC CAATTCACTA         360

TATAT                                                                    365
```

(2) INFORMATION FOR SEQ ID NO: 2979:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2979:

```
TGATTATATA AATCTAACCA GCCAAGTTTC GTCTGCGGTG AGACATTGAC ATTAATTGCT          60

GCAGATAATG ATTTAACAAC ATGTGTGGCA TGTGATTCAT TAACGATGAC.AATATCATGT         120
```

TGGCGATGGG TAACATTGTT AACATTGCTT CATTTAAAAC GATATCGAAT TGATTGTCAT   240

CAAAGGGCAA TTTAACAGCA TTCGCTTGTT GAACTTGAAT ATATGATTCA nGACCTGCTG   300

CGGAAATGTT TTCCGTGCTT TTTCTAAGCC TTCnTATTAT ATCAACGCCT GAnGTGACAC   360

CAnAGTGTGA GCCAGATAAA TAGAGGTGTG CACAGATACA   400

(2) INFORMATION FOR SEQ ID NO: 2980:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 384 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2980:

TTTCTGCTTT TGATAATCTT TCATCAATGC AAAAGCTACA TTGGACAGTC CTATAATGGA   60

AATAATGTTT ACAATTGCCA TTAAGCCCAT AAATAAGTCT GCCGTATTCC ATACTGTTTC   120

TGTTTTTACA ACTGCACCGA CAAAGACAAG TACTACAACA AGACATCTAA AGATAAATAA   180

TATTACACGG TTTGTTGATA AAAATTCAAT ATTAGATTGA CCGTAATAGT AATTACCTAC   240

AACAGATGAA AATGCAAACA GTGnAACGCT TATTGGTTAA GAAAATACCT CCAGCAGAAC   300

CTAAATGCTC CTTAAGTGCC GATTGGGTAA CTGCAACACC nTGGAGGGCG TTTATCACCA   360

AATTTnCGTC CCGAATATAG TAAA   384

(2) INFORMATION FOR SEQ ID NO: 2981:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 380 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2981:

AATTCTAACG ATATCACCAT TTTTACAACC ACGTTCTCTA AGCGCATCAT CAATACCCAT   60

CGAACGCATT TGACGAGCAA ATCGACGTAC TGCTGGATCA CTGTTAAAGT CAGTCATTTT   120

AAACATTCTT TCAATAGCAT TACCACTTAC CACATAAGCA CCATCATCAT CTCTTGGAAA   180

TTGTAAATTT ATCTTGTGAC GGTGTATGTT TATATAATAC TCGGTTAATG CCAACTGACT   240

CCTCTTCTTC AACTGTGGAG TCAACATCTT TATATTCTTC TGAATTTATC TGCTTATTGC   300

ATATGAATAA TTGnnCAATG ATTATCACGC GTTATTGTTG GAAACTGGGA TTAACTGGCA   360

(2) INFORMATION FOR SEQ ID NO: 2982:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 389 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2982:

```
CCTCAACCGC TTTACAGCCA ACCGGCGAGC GCTGnACATG GATCGCCTGG CCCATGCCCA      60

CGCCTTGGGC nCATCATTAT TAATTGCTGC AGTTACGGTA TCTTTAATTG CGTTAAATAA     120

ACCTTCCATT GAAAACACTC CTTAAAATTT AAATTTGAAG ATAACAAAAA CGTGCGTACT     180

TTnTGAAATC ACCGAAATGT TATTCGCTTA ACGTTTTGTT GTTGTTATTT TAAAATAAAT     240

TTGATGCAAT TAGTTTGTTT ATCCGCACAA CATCTTATAA TGTACTTAAC TGTATTTTAA     300

AGAGAAAAGA AATACAGTTA GGCATTCCAA AACTGTGATT TTAACACAAT TAAGTTGGCC     360

TGAATTCCGT ATTTGAAGTC CTAATGGAA                                      389
```

(2) INFORMATION FOR SEQ ID NO: 2983:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 379 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2983:

```
ATATTCCTAT GACAATGTTC AGGCAACGAT TCCAAGGATT AAGAAAAGAT CAACCGGTAT      60

ACTTATGTGA TGCCAATGGG ATTGCTAGCT ATAGAGCCGC TCGTATTTTG AAAAAGAATG     120

GATATACAGA TATCTATATG TTAAAAGGCG GCTATAAAAA ATGGACTGGA AAAATAAAGT     180

CTAAAAAATA GTTTTTGTAA ATTTAATATA CGATTTAATA AAATCTGAGT GTTAATTGAT     240

CATCAATAAC AATACTCAGA TTTTAATTTT TTAACAAAGT CTGTTACTAT ATTTCTCTAG     300

CTTCACTGAT CATTAAACCT TAGTTTCAGC ATAATTAAGG AAGGTCCGnC CCATTTCCAT     360

CGnGnTCCAT TACCGCCAC                                                 379
```

(2) INFORMATION FOR SEQ ID NO: 2984:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 374 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2984:

```
ATGCTGAAAA TATGGTGCCG TTTATATGAA TCAATTTGAA TCCGAACATA ATCCGGATAC        60

ATATTTTCAT ACATTGGGAC CCGAATTGAC TTCAGCATTA CAGCAAATTG ATTATTTTGT       120

GGCTGGTATT GGCTCTGGCG GTACATTTAC AGGTACGCAC GTTATTTAAA GCAACATCAC       180

GTGCAATGTT ATGCCGTTGA GCCAGAAGGG TCCGTGTTAA ATGGAGGGCC AGCTCATGCA       240

CATGACACTG AAGTATCGGT TCTGAGAAAT GGCCGATATT TTTAGAGAGA CGCTTGTAGA       300

TGGGnTATTT ACGATTAAGA TCnAGATGCC TTTCCGAATG TCAAAGTTTG CTATAATGAn       360

GGTGTAGTAA GCAG                                                         374
```

(2) INFORMATION FOR SEQ ID NO: 2985:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 464 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2985:

```
GGAGCCACCA TTGGAGCAnG TTACGGTGGA AAAGATACGG nAAGGTTnGT ATGACTGTAn        60

GTCTTGGATA GAGTAACAAA CCTAATTTGT TAACTCTAGG CCCCATATGT CGCAGTACCA       120

TCTGCATGTG TTGTTAcATT GTATGCATTT GTTTTACTTG GCTTCTTGtA TGTCGGGCGA       180

GCTCCGTATG ACACTTGACC GTTTGCATGT GTTGTTACGT TGTATGCATT TGTTTTGCTT       240

GGCTTGTTTT GTGTTGGGCG AGCGCCATAT GATACTTGGC CGTTTCCATG TGTTGTTACG       300

TTATATGCGT TTGTTTTGCT TGGCTTGTTT TGTGTCGGAC GAGCTCCGTA TGATACTTGG       360

CCGTTTGCAT GTGTTGTTAC ATTGTATGCA TTCGTTTCGC TTGGCCTCCT GTATGTCGGA       420

CGAGCTCCGT ATGATACTTG ACCATTGCAT GGGTGGTACG TnnG                        464
```

(2) INFORMATION FOR SEQ ID NO: 2986:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 359 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2986:

```
AACTATTATA TTAACATACA ATGTAGGGAT GTGATGCGCG TGAAGTTTAG GGATAAAGAT      120

AATCGTCAAG TTAATTTGAC ATTTAAAAAG GATAATGAGA TAGCAGATGG CAATCATGTG      180

CTAGCTATTC CAACGTTTAA AAATCAATTG CTTTTTACCA AACATAATTT ACGGGGGATT      240

GAATTTCCTG GTGGTAAAAG GGAACGCGGG GnAAAGTAGT GCTGGAAGCA GTTACACGTG      300

AATTATATGA AGAAACAGGC GCCAAATTGA AAAATGnTTA TTACATAGCA CAATGTnCC       359
```

(2) INFORMATION FOR SEQ ID NO: 2987:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2987:

```
TAGAATTCTT CTAATGAATG AGCTTCTTTA GAATGATAAC CATAACGAAT TCCGTCAAAA       60

CGAGAAAGGT TTGACGAAGC TTCTGATGAT GCAATCACGT AATATGATGG AATACCAAAT      120

TTAGTATTTG GCAATGATAC TTCCTCAACG ACAGCACCTA AAGATTTTAA AGTTTCTACA      180

GCGTTTTGAA CTGCTTCTTT TACGTCATCA GCTACACCTT CACCTAAGTA TTCTTTAGGT      240

AATGCAACTT TTAATCCTTT AATATCTTTT ACCAATTTCA GATGTAAAGT CTACATCATC      300

AACTGGTGCA CTTGTAGAGT CATTAACATC TGCACCAGAA ATAGCTTCTT AATACGGTTG      360

CATTATCTTT TACAnTTCGG GTCATGGnCC CATTTTGGTC                            400
```

(2) INFORMATION FOR SEQ ID NO: 2988:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 377 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2988:

```
ATTCATTCAT AATTATCAAT CCTTTGTGTT AAATTACTAT ATAAATAGTG TACGnATTTT       60

CGAAATTTGT GATCATAAGT TTATTCAATG CTAAACAATA AGGTTGAGAC ATAATCGTAT      120

CTCAACCTTG AAATTATTAT ACGTTGACGT CACTAGTCAT TCAGTTTTCT TAATGCTGCT      180

ACAATCTCTT TTTTAGTATC TTGTACTTCA GAAGCTTGCT TAATCACTTT TGCAGGTGTA      240

CCAGCAACAA CTGCACCAGC TGGTACATCT TGTGTCACAA TCGnGCCACT GGCAACAATA      300
```

nGATTATAAC CGTGGAG   377

(2) INFORMATION FOR SEQ ID NO: 2989:

        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 356 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2989:

CCAGGnACCT GGACACGCCG GGTCTTATCA TCAATAATAG TAGCATGACA AATCTACTAT   60

TTTTTCGCTA ATAAGTGGAT GTAATGCTAA TAATGTTGCT GTAGGGAAAC AGCCAGGATT   120

AGAAATGAGC TTCGTTCCAT TGTTATCAAA CGATTGCCAT TCTGAAATGC TGTAAATAGT   180

CATGATTCAA ATCATCTTGT GCCTGCAGCA GTTTCTTTGT AATATGCTTC ATATATTTCA   240

CGnTTCTTAA TTCTAAATGC GCCAGATAAA TCGATAACAT GAATACCTTT TTCTACTAAG   300

GGAGGGATAC ATGTTTTACT TACGGGTGCT GGTGTCGCAA AGAAAATTAC ATCAAn   356

(2) INFORMATION FOR SEQ ID NO: 2990:

        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 349 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2990:

TCATTTTCCA AGTGAGACTC TGCTCTTGCT TTGGCTAATT TAGCTCTTTC AACATCAATT   60

TCTCTTGCAG TTTCTGCAGT CTGAACAATG ATTGAAACTT TATCTTTTCT AACTTCAACA   120

AAGCCATCGC TTACAGCAAT ATATTCAGTT CCATCGTGGA AATTTCACTT TTACAAAGCC   180

TGTTTTTAAA GCAGCTACAG TTGGGAATAT GTCCACTCAT GACACCTATC TCACCAGCTG   240

TTGTTTGCAT AACAACGAGT TCAACATTAT CACGATTGTA AACAGAACCA TTAGGAGTGA   300

CAATATCTAG GTTTAAATGT CCATTATCCA TTCCnCCnGA ATTGGnTGA   349

(2) INFORMATION FOR SEQ ID NO: 2991:

        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 363 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2991:

```
ATGGCCACGT TCATGCCAAT AGCTGTCGTA GTCGCATTTT CACGTTCTAG TATTGCATTT        60

TTTAAATGCG ATGTGTGCTC TACATAACGG CAAATTTTAA GTTTATGAAT CAACATATCA       120

ATTGCTTCGT TTCGAGACAT GTCGTGGATC AGTAATTATC ATAGTTTGTT GATCAAAAAC       180

ATGAGAAGGT TTATTGAGAT GTGAATGTTT CGCGGTGTTA TCTACATTGT CAACCTCTGT       240

ATCATGTTGT GTAATATCTG TATCATGAAG TTGCGGTTGC GCTGGTGCAT CTACTGCTAT       300

AACTGGTGTA TTGCGTTTTA ATAATAGTAC AGTAGTnCAT TGTnGACAAG ACTnACCGAC       360

TTA                                                                    363
```

(2) INFORMATION FOR SEQ ID NO: 2992:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 349 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2992:

```
AAGTTTATTT TAAAATTCGT AATAAAAATA ATAAACTCAT CGAACGATTT AATGGTCTAG        60

GTTTCCATAT CAACTATGAG TACATTAAAT TCAAATTCGA ATCACGTAAC GTAAAAGATC       120

AAACAATCCC TGAATAAAAC ACCAAGCAAA TACCCTACAG TACATCATTA GCATGTATTG       180

TGGGTTTTTC TACTTTTTGT AAATATTGAn AATTATnAGT AGTTGTTTTT TACTATTAGG       240

GCAGAATGCT TTACAATAAC ATGCAAGTGT CAATTAAGGG GAGCACTTGC ATAAATAGTA       300

TAGGnGAGTG AGTAGTCCTG GCCATTTCCT GGAATTCCTT AATCGGCAC                   349
```

(2) INFORMATION FOR SEQ ID NO: 2993:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 399 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2993:

```
TTTGTGCAAT AAGCGCTTTT TGTTCGTTTG CTTTTGTTGC TAATTCATCT TTCGCAACAT        60

CTTTAATTGT TGTATCTGCA GTAATACCTT GAATATCAGC AACTGCTTGA TCTTTAATTT       120

GCGTAACATC ATTAGTTGTT TGTGCATTTA AGATATCTTG ATACGCTTTT TCTTTAGCTT       180
```

TTGCTTGATT TTGAGTTGTC ACAGCTTGAT CAACATCATT TTTAGCATTG ATTTAACCGC   300

TGTGCTGGTT GCGGCTTGAA TTGAATCTTC CAGGCTTCGC TGACTACACA TACACAGTGA   360

GnGnAATATT TCGGCTGAAC GCGTGCATGT GAAnGCTCT   399

(2) INFORMATION FOR SEQ ID NO: 2994:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 326 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2994:

AATGACAGGA ATCGTCGTTG CCTTTACTAA TTGACCAGTT AATTCAAAGT TAGGTCCGGA   60

CATTTTGCCA TCTTTAGCAA TATCAGTATA TATAATGCCG CCAAGAGGTA TATCCGATAA   120

CCGTCTCACA AACTAAATAA ATTTAACTCT GTGTCCTCTT CCCATCCGTT CACTTTAATA   180

TCTTCTCCAT AGGCATCAAC AGATAAATAA ATGCGACCTG GAAATGTATG TGCCATCTCT   240

TTAAGCCAAT CAGTATCTTG AATACCTTTC GTTCCAACTA TGCAATAATT AATCCCTGCG   300

GCAAAGTAGT CCATGATTTG TGACTT   326

(2) INFORMATION FOR SEQ ID NO: 2995:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2995:

CTAATGCCGA TGAGCAAAAC ACAAGCATTA GAAATTATTA AAAAGTTAG GTACGTATAC   60

AACATTGATT TTGATAAACC GAAGTTAGAA ATGTGGATTG ATGTATTAAG TCAAAATGGA   120

GATTATCAAC CAACTGTAAA AGCGGTAGAT GTTTATATCA ACAGTAACAA CCCGTACCCG   180

CCTAACTTAC CAGCAATCAT GCGTAAGGAA CCTAAAAAAG TATCTATCGA GCCAGTAGAT   240

AACGAAACCG CTACACACCA TGGGAAAATG CAGAATGACC CGAATTGTCA GACAAGGAAA   300

ATAGCGCTAG ATAGTTCATG AATAGTTGGC AGATTGGGGC GAACGATGAT ACGnCATTCG   360

ATTGAAGTCA TATCGTCGTA CTTAACACCG GACGTTnGAA   400

(2) INFORMATION FOR SEQ ID NO: 2996:

       (A) LENGTH: 400 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2996:

GAATGTAAGT GTCCCTTAAG CATAGTGCTC CCACCTTAAA TTTTGTTACA TACTTTCATG   60

GAATGTACGA GAAATTACAT CTAATTGTTG TTCACGTGTT AATTTAATGA AGTTAACAGC   120

GTAACCAGAT ACACGGATGT TAACTGTGGG ATATTCTTCT GGATGTTCCA TTGCATCTAT   180

TAATGTTTCA CGGTTAAATA CGTTAATATT TAAGTGGTGA CCACATTGCA TTGCGTAACC   240

ATCTAACATA CTAGTTAAGT ACGGTTTGAT CTCTGGnTCT TTACCTAATG ATTTGGnACG   300

ATACTGATGT ATTGAAATAC CATCCTTACA GCATCGTAAG GGGTCCTAGC CACAGAACTT   360

ATGAAGAAAT GCACCTTTTn GGCACnGGCA TGCATGGGGT   400

    (2) INFORMATION FOR SEQ ID NO: 2997:

       (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 335 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2997:

ATGATATTAA CCTGTTTACA AGATGGTTGA TACTTGCGCA TGAnATTTGA ATCTTCAACA   60

CCATATTATT ATGGTACATA CGAAACTGAA AATGAATCCA TAGTTACTGA CAAAGAAAAA   120

ATCTTAGTAT TAGGCTCTGG ACCAATTCGA ATCGGCCAAG GTGTAGAATT TGACTATGCG   180

ACAGTTCACG CCGTTTGGGC AATTCAAAAA GCAGGGTACG AGGCGATAAT TGTGAATAAC   240

AATCCAGAnA CAGTTTCAAC AGATTCTCAA TTTCTGACAA ATTATACTTT GAACCTTTAA   300

CTGAnGAGGA TGTGATGAAT ATCATTAATT TTGGA   335

    (2) INFORMATION FOR SEQ ID NO: 2998:

       (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 397 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2998:

GCAGTAACTA ACTTTTGTAC AAAAGGATCA TTTTTATCAA CATAATGTGG TGGTTGGACT   120

TTACCTAATT TCACTTCAAA GtATTGTTGA ATCTCATTTG CAAAACGATC CATAGCTTTT   180

TCAAATTCAA ATCCTTCTGG GTAGCGTAAt TGATACCGAA AAGACCTGCG TTTTCATTAT   240

CATATGTAAT AACACCAATG TTAGTTGTCA CGTCACCCAT GgACATCTGT ATGGgAATTT   300

CATTCCCAnC TTTTTCACCA AAATCnGGAA TTGAAATAAG TGAGCGATTA CGAAATGGCG   360

ACAAACGCCT GTGGCATTGA TnGAGCAAGA TTnAAGG   397

(2) INFORMATION FOR SEQ ID NO: 2999:

    (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 400 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2999:

AAAGCTGTGT TGGTAAAGAG TTTTGTCGAT TTGGTACGCA ATACACGACA CGACTTGGCA   60

TTCGTTTAGA AAAAACATTT GAATACATCG ATACACCTCA TAAATTCAAA ATGGGTGTAT   120

CAGGCTGCCC AAGAAGTTGT GTTGAATCAG GTGTTAAAGA TTTTGGTATT ATCTCAGTTG   180

AAAATGGGAT TCCAAATCTA TATCGGTGGT AATGGTGGTA CAGAAGTTGA AAAAGCTGAA   240

TTTTTAACAA CTGTAGAAAC AGAAGATGAA GTAATCAAAT TATGTGGTGC TTTGATGCAA   300

TATTGAnCGC GAAACAGGTA TATATGCnGG AAAGAACCAG CGCCCAGGTT AAGAAGACCT   360

GGATTTGAAA ATGTnAAAAG AAGTCCTTAC CTGGGCCCCG   400

(2) INFORMATION FOR SEQ ID NO: 3000:

    (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 506 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3000:

AACGGTAGTA TTACAGAAAG CTCTACTTAT GGTGATAATG ATACACCAGC GCCACCAACT   60

GACGAATTAG GTGGTAGTTG GACACTATGG AAAAATTTAG CGCGACAAAG TCCTGAATTT   120

GGTAATCCTG ATAAGTTTTG CCAAAATATT CCTAAAAAAA GTTGGTTTGT TTCAGCAACT   180

TCTACAACAA ACAATAAAGA GATTATCGAT ACAATAGAAA GTATTTGTAA ACGTGACCCA   240

```
AGTTTTACAA TCAATCGTCA GCmACAGTTT aAAGACCAaC CTGrAAATGA AaTATCTACA        360

TGGATTTATG CCTTATATyC AGATGTAAaC GGCGATTATA TTAAAAAGCC AATTACAGAA        420

TGTAGTGGTA ATGAAATATG CCAAGnATGG CTGTATCnCT TnGGTGTATC AACTGACAAG        480

ATTGAAGACT TAGCAAAACA TGCGTC                                            506
```

(2) INFORMATION FOR SEQ ID NO: 3001:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 353 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3001:

```
ATTGATGGCA TCGAAAAACT TTAATAAGAC AACAAGTTGA TGAGATATAT GTATATAGGT         60

TTGGCATGGA TTTCGATTGC AGTTAATTAG AATAGCTCAA TGCTATAAAT GTAAGTAGTT        120

GATATGAAGA AACTAATGAA CTAAATGCAA GTATTGTCTA AAACAATCAT TTTATTGAAA        180

TTTAGTAGAG CTGAAATTAA TATAACGTCG TTAATTGAAT AACGCTTATG TTATAAGAGC        240

ACTCATACCA nACCATAATC ATCTATAGnT ATAACAATTC ACGTATAAGG GGCTGTGTTT        300

GGCATAGCCC TTAGGTATAC ACCTAATTCC CATTAAAATA GTAGGGGnTT AAA             353
```

(2) INFORMATION FOR SEQ ID NO: 3002:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3002:

```
CAACAAAATG TCTATATGGT AAGTGGTAAA ACGAAAAATG ATGAAGACTA TTCATCAACT         60

ATTTTATATA ACAACGAAAA AGAATTACAA AAAATTACTG ATGCTGCTAA AAAGCAAAAC        120

GGTGTAAAAT TAACGATTAA AGAAGAAGAA AAACAAAGTG TCTTTGTGAG TATACTTTCA        180

ACATTAATTC CAGTTGTAGT CATAGCGTTA TTATTTCTTC TCTTCCTAAG CCAAGCACAA        240

GGTGGCGGTA GTGGCGGTCG TATGATGAAC TTTGGTAAAT CTAAAGCAAA AATGTACGGT        300

GATnAATAAA CGTCGTGTTC GTTTCTCTGA TGTAGCCAGG GGCCAGATGn AGGAAAACCA        360

AGGnTTAATT GGAAATTGTT GGTTTCTTGG AAAGGTAATG                             400
```

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 400 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3003:

```
ATAACATCGG CACAGCAGCT AAAATAACCA TACCCAAAAT GAnTGTATCT TTAAACGTGC      60

ACCGTAAAGn CTTCCGACTA GCCATGTATA AGCTTTGGCA GCAGATAATT GCTTCGTTGT     120

AATGAGTAAT CCTTGGACAA GCGCAATAAA CAACGTTTGC ATCGAAATAC CGATGATTAT     180

GAGTGTTGTC GGGCGTATTT GTCCTTTCGT TTGAAACACT AATAGTATCA TCATTGCAAC     240

TGCGCCACCT AATACTGCAA ATAGTGGAGT AAATGTATTG TTAAAGGCTG AAAATGCAAT     300

AAAGACAACA GCACTTAAGC TAGCACCACC TGTGATACCG CTAATATCAG GTGAGGCCAA     360

TGGnnTTTTT TTATACATTT TGGCAACATT TAACCACTTC                          400
```

(2) INFORMATION FOR SEQ ID NO: 3004:

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 354 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3004:

```
CTAATAACAA ATGCGATGAT GATTAATACT AATTTACCTG CTGCTAATAC AGAATCTCCA      60

AGGAATGAGA AGAATGGTTG ACGTTCAACT TCATTGTTTT TAAGACTGTA GATAATATCT     120

TCTTTCTCTT CAACACTTAC TGGATTCAAC AAGCATGACA CAATAATCGC GTTAACGGAT     180

ATTTAGTGGA ATTGCCGTTA GTACCAGTTC TCCTGGTACC ATTTGTACAT ACGCACCTAC     240

AATAGCTCCC GATACAGAGC TCCATTGACA TCATTGCGAT TGTTAATACA CGCATTTCAT     300

TnCAGACGTT TTAGTTGCTC ACTTGGATAC GGGCTAAnGC TTnCGTGAAT TGCC          354
```

(2) INFORMATION FOR SEQ ID NO: 3005:

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 378 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

GGTCAGCTTA TTGAACAAGG GACACGTGAA TCAGTCTTGC ATCATCCAGA ACATGTTTAT   60

ACGAGATTTA TTATCAACGA AGAAGAAGAT TAATGATCAT TTTAAACATG TGATGAGGGG   120

TGATGTACAT GATTAAAATT AAAGATGTTG AAAAGTCATA TCAAAGCGCA CATGTTTTTA   180

AGCGTCGTCG AACACCTATC GTGAAAGGTG TGTCATTTGA GTGTCCAATC GGTGCGACGA   240

TTGCGATTAT CGGAGAAAGT GGTACGGnTA AATCGACGTT TGAGTCCTAT GATATTAGGT   300

ATTGAGGAAC CGGATAAAGG TTGTGTACCC TTAAATGATC CACCGATGCn TAAGAGGAAG   360

TGAGCCGCCA CCnATTGG   378

(2) INFORMATION FOR SEQ ID NO: 3006:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 1785 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3006:

ACnTTAGTTG GCCAAGCCTT TATCCGGAAT TATTGGGCCT TAAAGCCCCC TTAGGCGGTT   60

TTTTAAGTCT GATGTGAAAg CCCCgGCTCA ACCGTGGAGG GTCATTGGAA ACTGGAAAAC   120

TTGAGTGCAG AAGAGGAAAG TGGAATTCCA TGTGTAGCGG TGAAATGCGC AGAGATATGG   180

AGGAACACCA GTGGCGAAGG CGACTTTCTG GTCTGTAACT GACGCTGATG TGCGAAAGCG   240

TGGGGATCAA ACAGGATTAG ATACCCTGGT AGTCCACGCC GTAAACGATG AGTGCTAAGT   300

GTTAGGGGGT TTCCGCCCCT TAGTGCTGCC AnTAACGCAT TAAGCACTCC GCCTGGGGAG   360

TACGACCGCA AGGTTGAAAC TCAAAGGAAT TGACGGGGaC CCGCACAAGC GGTGGAGCAT   420

GTGGTTTAAT TCGAAGCAAC GCGAAGAACC TTACCAAATC TTGACATCCT TTGACAACTC   480

TAGAGATAGA GCCCTTncTT CGGGGGACAA AGTGACAGGT GGTGCATGGT TGTCGTCAGC   540

TCGTGTCGTG AGATGTTGGG TTAAGTCCCG CAACGAGCGC AACCCTTAAG CTTAGTTGCC   600

ATCATTAAGT TGGGCACTCT AAGTTGACTG CCGGTGACAA ACCGGAGGAA GGTGGGGATG   660

ACGTCAAATC ATCATGCCCC TTATGATTTG GCTACACAC GTGCTACAAT GGACAATACA   720

AAGGGCAGCG AAACCGCGAG GTCAAGCAAA TCCCATAAAG TTGTTCTCAG TTCGGATTGT   780

AGTCTGCAAC TCGACTACAT GAAGCTGGAA TCGCTAGTAA TCGTAGATCA GCATGCTACG   840

GTGAATACGT TCCCGGGTCT TGTACACACC GCCCGTCACA CCACGAGAGT TTGTAACACC   900

CGAAGCCGGT GGAGTAACCT TTTAGGAGCT AGCCGTCGAA GGTGGGACAA ATGATTGGGG   960

TATATTCGGA ACATCTTCTT CAGAAGATGC GGAATAACGT GACATATTGT ATTCAGTTTT   1080

GAATGTTTAT TTAACATTCA AAAAAATGGG CCTATAGCTC AGCTGGTTAG AGCGCACGCC   1140

TGATAAGCGT GAGGTCGGTG GTTCGAGTCC ACTTAGGCCC ACCATTATTT GTACATTGAA   1200

AACTAGATAA GTAAGTAAAA TATAGATTTT ACCAAGCAAA ACCGAGTGAA TAAAGAGTTT   1260

TAAATAAGCT TGAATTCATA AGAAATAATC GCTAGTGTTC GAAAGAACAC TCACAAGATT   1320

AATAACGCGT TTAAATCTTT TTATAAAAGA AAACGTTTAG CAGACAATGA GTTAAATTAT   1380

TTTAAAGCAG AGTTTACTTA TGTAAATGAG CATTTAAAAT AATGAAAACG AAGCCGTATG   1440

TGAGCGTTTG ACTTATAAGn ATGnnnGATA TGTTGAATAT CCATATCTAA AGCTAGATCT   1500

AAACTTTGTT CAAAATCTTC AATCGTCTGT TTCGGTAAAT GATACATTAA ATCTAAACTG   1560

ATTGATTTAA TACCTGCGTT TTTAGCATTT AACACCGAAG TGTAAATATC TTCAGTATTG   1620

TGCGTTCTAC CTAAAACAGA CAATAACTCC GGCTTGAATG TTTGAACGCC CATTGAAATC   1680

CTTTTTACTC CATATTTCTC TAATAGTTGG ACTTTCTCTT TAGTTAACTC ATCAGGATTT   1740

GCTTCAAATG TATACTCGCC TGTGATTGTA AACGTATCAC GTATT   1785

(2) INFORMATION FOR SEQ ID NO: 3007:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 360 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3007:

TGCAAAAAAC ACAATAACGA TAAATGTTCC CATTGATCCT ACAGCATCGC GAACATTTTA   60

CCTAAGTCTT TTGTATTTTT AATTTCTTTG CTTAAAATCC CATAAACTAA TCCAGGTACT   120

AAAAATACGA CAAGAATAAT TAATCCGACA CCGTTAATTA ATGGCGATCG TCTAGTAAGC   180

TGCCTGTTTT AGCATTTCTT AAAAAGCTAT GTCAGGAATG GCTGTAATAA TTAATAAAAT   240

AATTGnGCTA TGAACTGATA TTTGCCATTT TAAAAnATGT GCTCTTTGTC AGAATATGTG   300

AGATGTnCTC ATGGCATCAT GCATTAAACT GCATCATATT TTCCTAATCT AGGATAATGA   360

(2) INFORMATION FOR SEQ ID NO: 3008:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 350 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3008:

```
TTGCCTTCAA ACACATACTT GTAGTCGGAT GATCACCTGT TCCAAAAGnC ATACCTGGGT        60

CGAGCTCAAT GCAAAGCTCT TCATCCGCTT CTTTAGCATA TGTTTCCCAA CTAGGAACTA       120

TTGTGAACTT CTTCGACGCT CGGGAATGGA TGGAAATAGT TTTTCCATTC ATTTTCCCAA       180

TCCGTCTCTG CAATAATTTG CTCACTGAAT TGAACGTTAT GTTGATCAAG TTCATCTAAA       240

TTTAATAACT CATCTTTGAA TTTGCTGTCG CAACTGTATC ATCATAAGTG CATTTCAGTA       300

AAATAGGCTT nGCAAnCTTA CTCCCTTATC TGGGATAAAG CCTCGGTTTT                   350
```

(2) INFORMATION FOR SEQ ID NO: 3009:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 383 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3009:

```
TCTTATATCA CCAGGAATTA ACACTGCCTT TTGACCACTT TCTTCAATCA CTTGGCGTAC        60

TTCTTGTGCA TCTTGTTCTT CACTCGGAAG ATAGTTAATC GCTACATCTG CACCTTCTTT       120

AGCATACGCA ATTGCTGCTG CACGCCCTAT TGCTGAGTCA CCACCTGTGA CTAAtATTTT       180

ATAGCCTTGT AAGCGTTGAT GACCTTGGTA AGACGTTTCG CCACAATCGG GTGCTGGCGT       240

CATTTCAGAT TGTAAACCCG GTACCTCTTG TTCTTGTTTT TCaTAATCCG TTGTTTTAAA       300

TTTTGTTCnA GGaTCTkGAG CkGCCAtTTT TtGACAyCtC CGTATnCGCT TAATGGGTAT       360

CATTTACCCC AATCTTCCTA AGG                                               383
```

(2) INFORMATION FOR SEQ ID NO: 3010:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 388 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3010:

```
TAATTCAACG GGAATTTTCC CTTTGAAGTT AACATAACGG TAGGCTGCTT TAACAGCTTC        60

ATCATCGGGC GCTTCGACAT CTTCTAATTC ATATGCAATG CCCAATGTTT TCCACTTATG       120

AACACCTAAC TGATGATATG GCAGAATTTC AAACTTTTCG ACGTTATCAA GAGAATTAAT       180
```

TGTCGAATCC ATACCAGGTG GTTTCATATC TGACAGTTTG CGCGCGAAGT TAAAGGATGT   300

GTGTATTAGG GCTTTCCCGG TCCATCCAAA TAnGGTTGGT CCATTAATCC ATAAGGTTTT   360

AnAATCnAAA TAATAATCCA GTCCGGTA   388

(2) INFORMATION FOR SEQ ID NO: 3011:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3011:

ACTGCTGTAA CGTCAGTTGA TCTTTTCATT CTTGGTTTAA TTTCTGAGAC GTTACTTGGT   60

TGnGCnAnGC CACCAATTGC CATACCGACA GATTGGAAGA ACAATGCATC AGTTCCACCA   120

ACACCAAAGA TGTCACCAAG TACAACGAAA CCTACATATC CAACTGTAGA TACAATTAAA   180

ATACCCATTG CTTTTTTAAA TTCAGGATTA TCTGATTGAC GTnCATTTTT AGCTTTAAGT   240

GAAGTAAGTG CTACACCAGT AACTAATAAT ATCATGGCGA TTAAACCAAA GATAATTTGA   300

GTCATTGAAG ACCATTCACC TAAAAGATA ACGCTGGAAT AATGGTGTAC CCAACTAATT   360

GGCATACCTG GTAGGAAACT GGGCATAGGT ATTTGGATAC   400

(2) INFORMATION FOR SEQ ID NO: 3012:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3012:

TTATCGGATT CGTTAATACT GGCGGTTTAC GCAATAGTTT AGATGTAGAT GATAACAATG   60

TGCCTATTAA ATTTAAAGAA GAGTTCGAAC CTAGAAAGTT TGTTTTCACT AACGGCGAAA   120

TTAAATACAA TAGCAATTTC GAAAAGAAG ACGTACCGAA TGCATCAAAC CAACAAAGTG   180

CGTCAGATTT AAGTGATGAG GAACTTCGCG GAATGGTTGC GAGTATGCAA ATGCAGGTGG   240

CACAGTAAAC GTATTAACAA TGGGATTAGC TCAACCAAAC GCTATGTTAA CACCACAGTT   300

GACTGACTGG AAACTACCAA ACCAGTACTG AGGGGnCGTT AATAATGAGT GTTTCCACTT   360

AAGCATAAAC TTTTGTTGGT CTTAAACGGC ATTAGTGTCG   400

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 389 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3013:

```
GGCTGTAATG AAAATCCAAA AGCCAAGCTT ATTTAATTCG CCTTCATGTG TGCGTGAATC      60

AATAGTGTTT GTATCATGAC TCATGACTTA CAGCCTCCCT TTCTTTAATA CGCGCTTCTC     120

TTAATCTAGC TTCAGTTTCT GCAACTTCAG CAGCAGGGAT ATGATATCCG TGATCGATTT     180

GGAAACTGCG ATAAATCATA GTACCAAAAA TACCGAATAA ACAAATTAAT GCTGGAATTA     240

CAGTTTCGAA AATTAAGAAG AAACCGCCGA TAGTCATAAA GATACCAATC CAGAATCCAA     300

CAGGAGTAAT GGTTTGGCAT ATGGATGGCC TTGGnAATAA TGGGTTGnCC TAAGTAATGG     360

CCGACCAAGG TCCTTTCCAn ATCCACCAA                                       389
```

(2) INFORMATION FOR SEQ ID NO: 3014:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3014:

```
AATCGCTTCG GTTAACTGTT CTAACCATTC GTAATAAACA TGTGTATGAT CAAGCTGAGC      60

TTTAATTTTT TGTGCCTCTT GTGTTTCAGC TTCAGTTAAA TCACTGCTTT CAAGTAATGG     120

ATTGATAATA GCTTGAGCAT CTTTTACTGC TTCGACATTG ATGTCAATTT CACGCTGGAA     180

TTTTTTAGTG AAAAAGTTTC GGAAAAAGAT GAAAAAGTCT TTCTCGGCGA TAAAATGTGT     240

TTGCGGCTCC TCTCGTAAAT TGTGGTTAAC AATATCAAAT TCCTGCAATT CCTAACGCAG     300

CACTCATACT nGTTGCnCAT TGCAATGATG ACGCATTCAC AGGGCAACTG CTCAACACAT     360

GGGCATAAAG TTCCACACTC ATAGGCAACA ATCATGGCGG                           400
```

(2) INFORMATION FOR SEQ ID NO: 3015:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 379 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3015:

```
nCCTATCTCT GGTCGAGAGT CTTTGAGCTG AAAAATGTGA CACACAAAAT TGCAATGGnA          60
TCAACAAATG TTTCCCATTG TGGATGGTCT TGACTAAGTA TTTGGTGTTC AACTTGGTGA         120
TTTGCCATGA CTAATACCAT GTCATTTGTA CTTGTATCGC CATCAACAGT AATCATATTA         180
AATGTATGGT CAGTCGAAGA TTTTAATAAT TGATGAAGTG TATTCGATTC AATCGATGCA         240
TCGGTTGTTA TAAAAGCAAG CATGGTAGCC ATATTTGGGT GAATCATACC TGAACCTTTG         300
GTGCTACCAC CAATTGTAAC GGTTTACCAT CGATTTTAGT GATACAGCGA TATGTTTTGT         360
ACAGGTATCA GTGTTAAAA                                                      379
```

(2) INFORMATION FOR SEQ ID NO: 3016:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3016:

```
CATATAAATT GCTAACGTGC CACCATTCAC TAAGGAATTG ACATCCACTT CATTTTCTTC          60
TGAATCTTTA AAGTGACCTG TAGAAAATGT CACACTTTTA GCAACTGTAC GCATTGTCAA         120
ACCTGTCTGC ATAGTAGCAA CTGCTGCGCT CGCTGATGTC ACCCCTGGTA CAATTTCAAA         180
CGCAATATGA TGTTCATTTA GTATGTCGAC TTCTTCTTGC ACACGACCAA ATATCGCTGG         240
ATCGCCAACT TTAAGTCTAA CAACCTTGTT ATATCGACGC GTGCTTCCAC GATACAGTCA         300
TTATTTTTCT GGCGGAAAAT GTTTGGAAAC GGCTTTTACC AACAnGGTAA TTCAGAGGCA         360
ATCGCAATGn AAATTACGGn TCACnAACGG TCATTGGATG                               400
```

(2) INFORMATION FOR SEQ ID NO: 3017:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 310 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3017:

```
CCTTTTTCTC TTCTTTCATA TCTGCAAACG TGCATCAATT TTAGGATCTA AATCTCCAAA          60
TGCTTCTGCA ACTGGTTCAG AGCGTTCATA ATACATACGA ACTTTTGGAT ATAACGCTTT         120
```

TCATTTAACT GTTCATCAGT ATATTTATCA TATGCTTTTG TTGCTTGTTT TAATTCTGCT   240

TTAACACCAT CATCTTTTTT CGATGTCTTT GAATCATCCT TCTTACTATC GTCGTTCCCC   300

ACATGCAGCA   310

(2) INFORMATION FOR SEQ ID NO: 3018:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 350 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3018:

TCGCTTTGTA AATTCTGGAA CAAAGnCAGT CATGACAACA ATTCGTGTTG CACGTGCATA   60

TACTAAAAGA AATAAAATTA TAAAATTTGC TGGATCTTAT CATGGCCATT CTGATTTAGT   120

ATTGGTTGCA GCAGGTAGCG GCCCATCTCA GCTCGGTTCT CCAGACTCAG CTGGTGTTCC   180

AGAAAGCGTC GCACGTGGAA GTCATTACTG TACCTTTCAA TGATATTAAC GCCTATAAAG   240

AAGCAATTGG AATTTTGGGG TGATGAAATT GCCGCAGTAT TAGTAGAACC AATTGTTGGT   300

GAACTTTGGG AATGGnnAAT GCCTCAACCT GGGATTTTTA GGAAGAGGGT   350

(2) INFORMATION FOR SEQ ID NO: 3019:

     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 400 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: double
         (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3019:

ATATCATGTG CCAGTGAAAG CGGCACTGGn CGGATATGGC GCACATATGG ACATTATGAA   60

AGAGTACCAA TTAATCATTT TAGCGCCACA AGTTGCGTCT AACTATGAAG ATATTAAGCA   120

AGATACAGAT AGATTAGGTA TTAAATTAGC GArGACTCAA GGTGCTGAAT ATATCAAATT   180

GACACGrGAT GGCCAAGCAG CCCTTGATTT CGTTCAACAA CAATTTGAAA ATTAAGAATA   240

GGAGTTTTTC ATATGACTAA AACATTACCT GAAGGATTTT ATTTTTGGTG GAGCAACAGC   300

AGCATATCAA GCAGGAAGGT GCGACCAAAT TACGGGATGG GTTAAAGGTC GCGTGCATTG   360

GGGATACGGT ATTTTAGGAA GGAAAACTTA TTTGGTACCA   400

(2) INFORMATION FOR SEQ ID NO: 3020:

        (A) LENGTH: 361 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

5

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3020:

10 ACGTTCGTCT TACGTTTAAC GCCATACGGT GTATTAGCAA TTATGGnCCA ACACATTATC   60

    GACAAGTGAC TTTGGCGCCA TTTGGACTTT AGGAAAAATT CTTAATCGCA TCGTACGCTG   120

    CATTAATTAC GATGTATATC ATTCACTTAA TTATTTTAAG CCTGTTAGGT ATTAGCCCAA   180

15 TTCGCTATGT TAAAAAGACT TTGGAAGTAT TAATCTTTGC ATTCACATCA CGCTCAAGCG   240

    CGGGTGCCTT ACCAATGAAT GTACCAACAC CAACCAGACG TCTAGGCGTG CCAGAAGGTA   300

    ATGnCAATTT CGCTGCGACA TTTGGAATGG CGATTGGACC AAATGGGTGG GCAAGnAATT   360

20 A   361

        (2) INFORMATION FOR SEQ ID NO: 3021:

        (i) SEQUENCE CHARACTERISTICS:
25   (A) LENGTH: 356 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

30

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3021:

    CAATGACCAT GACCAGTTGA TTTGGAACAA TGATTGACAT TGGAGCTATG CATCAAGTTT   60

35 GTCTTTAAGA CTACTAAACC CACGAACCAT GTTAACCCCG TGGTGCACCA TCACCAATTG   120

    nCTCGATCTA ATTCAGTTAA TTCAGATTCA TGTTTTTTAA ACGTTTCTTC TAAATTTAAT   180

    AAACGTGnCT TTCATATCAT TCACTTTCAT TTGTGnCCAC CTCATAAATG TATATTATCA   240

40 TATTCACTCT TATTAAAGTA TGACTGTTGT TGGTGCTAAA AATGCTCCAA ATATTCGGTT   300

    TATTAGGCAC GATAGTTATA GAAAAACCTG ACAGTCTAAA GATGTCATAT AATCAC   356

        (2) INFORMATION FOR SEQ ID NO: 3022:
45
        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 332 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
50   (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3022:

55

GTGTTTGGTC CAATATCCAT ACCTTCTTGG nTCTGCTGGA ATTGAATCAG ATGGTACTAC   120

AGTGATTTTG GCATCATTAG nAAAATTCTT TAGTCAACTT TAGTGTCTAC TGGTAATACA   180

ATTTTATCAC CATGTTTTTC TAATAAATCT TTTGCGAGTC GGATTTTATC TTCTTCTAAT   240

AATGAAATAC CAATTTCTTT ACCTTGCGCT TTTAAGAAAG TATAAGCCAT ACCTCCGCCG   300

ATGATAATTT TATCAGCTAT GTTAACTAAT AA   332

(2) INFORMATION FOR SEQ ID NO: 3023:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 311 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3023:

AAAGGTATTC CACAAGAATT AGCTTTGCAA AAATGCCAAA GCAAACAGAA GATGGnACAA   60

TTTAAAGTGn CCTACAATCA TGAATGAGGA GGACGCGTAA GATGAGCATT CGCTACGAAT   120

CGGTTGAGAA TTTATTAACT TTAATAAAAG ACAAAAAAAT CAAACCATCT GATGTTGTTA   180

AAGATATATA TGATGCAATT GAAGAGACTG ATCCAACAAT TAAGTCTTTC TAGCGCTGGA   240

TAAAGAnAAT GCAATCAAAA AAGCGCAAGA ATTGGATGAA TTACAGGCAA AAGATCAAAT   300

GGATGGCCAA T   311

(2) INFORMATION FOR SEQ ID NO: 3024:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 319 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3024:

ATTAGACATT ACAAGGTGCA GTACGTGCAA CATATTAGAC ATATTGAATT AAGTGGTCAT   60

GnAAGGTATT GACAGTTAAA AAAGTTGAAC AATTAGAAGA AATCGAGGGC TTAATATTAC   120

CTGGTGGCGA GTCTACAACG TTACGTCGAT TAATGAATTT ATATGGATTT AAAGAGGCTT   180

TACAAAATTC AACTTTACCT ATGTTTGGTA CATGCGCnGA TTAATAGTTC TAGCGCAAGA   240

TATAGTTGGT GAAGAAGGAT ACCTTAACAA GTTGAATATT ACTGTACAAC GAAACTCATT   300

CGGTAGACAA GTTGACAGC   319

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 320 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3025:

```
GGTGCCAAGC AATAAATATG ACTATGCTCA AACTGAATTA ATGGTGGGTG TGTCGCCATC      60

GTAATTGGAT CGTCTGAAGG CGCATATAAA TGATAGTGCT CTTCGAATAA AGGTAGCATA     120

TGTAATTGTT TGTGTTTACG TATTTCTGGT GGTAAGTTCC GTGAAACCCA ATGTCTATAT     180

TCCCATTTAA TACGCTATTT ATAAnTGTGT CATGTTCTAA TAAGCTCGGT ATGACATGTG     240

TATCATTTTG TAAAATGAAC GTTTGGATAA GnGGGAGTAA CATGTGGGAT ACGTCACTCT     300

CATCAAGCCA TGTAGATACn                                                 320
```

(2) INFORMATION FOR SEQ ID NO: 3026:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 328 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3026:

```
TCTCAACAAA TGCATCCAGT ACTTAAATTG GCATTATAGT AATTTAAGnA CAATATATCA      60

ATATTTCTCC TTATCCAGCA ACAGCAAATT TATTGGTAAG GTGTACGATT GAACCTTTAG     120

TCAATGAAGC AGGTACATTT GGATTGGCCA GGTGGATTTA CTTCAACTGA GCGCTTTGTG     180

AGAATGGGCA TTTATGAAAG CAAACATTGC TCAAAACAAT GATAAAGAAA TGGATTTAAT     240

GAATGCATTT TATTTATTAG ATGCGGTAAA TATACCGATT GGAATTGTAC GTCCGCATGA     300

TGCTGACAAT CACTATACGA TGTATCCA                                        328
```

(2) INFORMATION FOR SEQ ID NO: 3027:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 322 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3027:

ATTGAAAATA TGTGTTCTnT GTAAAATTTT AATCGTTCGC CACGATGCTG TTGATAAAAA   120

TTCAAAAACT GGAGTTGATC TTCTAGTTCA ACATAATCAT CGTAATTAGA CATGTAACCT   180

TTGATTAAGA TTTCAAGTAC ATGATCTTCG ATAGTATTGn TTTTAACTTG TTGTTGAGCC   240

GCTATATCTT CCATCGTGGA ATTGTTCAAG CAATTTTGTA TAAGTAATAT AAGTTCGATT   300

TAATGAATGT AGGTTTCATT AT   322

(2) INFORMATION FOR SEQ ID NO: 3028:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 313 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3028:

CAAGAATCTT ATACTTATCA AAATTTATAC TGTGAAGCGA GTCTATTGGC TAAAAGACTC   60

AAGGCTTATC AACAATCTCG TGTTGGGCTA TACATAGATA ATTCGATTCA ATCGATCATT   120

TTAATACATG CATGTTGGTT GGCAAATATT GAAATTGCGA TGATTAATAC AAGGnTGACA   180

CCTAATGAGA TGACGAATCA GATGAAGTCA ATCGATGTAC AATTGATTTT CTGTACCTTG   240

CCACTGGAAT TACGAGGGTT TCAAATTGTA TCGCTGGATG ATATTGAATT CGCCCnCCGG   300

GCnTATTACA ACG   313

(2) INFORMATION FOR SEQ ID NO: 3029:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 386 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3029:

CTTCCAAAGA AAAGACCACA GTTTTTGACG CATCAATATG GTGCAATTTT AGAGACACTG   60

TAGTTGCAGA AGATGGTTCA GTTGGACTTT GAAGACAATC GTTATACAGA AACACGCGTG   120

CCGCTTATCC AATTAATCAC ATTGACAATA TTGTAGTACC ATCTAAAGCA GCACATCCAA   180

ATACAATTAT TTTCTTAACT GCGGATGCAT TTGGTGTTAT TCCACCGATT TCAAAGTTAA   240

ATAAGACCAG CAATGTATCA TTTCTTGAGT GGTTCACTTC TAAATAGCTG GnCAGAGCGT   300

GGTGTGACAG ACCTGACCAT CATCTCAACA TGTTCGnGCA CCGTCTTCCG TACATCnACT   360

(2) INFORMATION FOR SEQ ID NO: 3030:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3030:

```
TGATGGATTG GCTAGCAGGT GTTTACATTA ACTCATTAAA TGTTATTCAC TACATGCACG      60

ATAAATACAG CTATGAACGT ATTGAAATGG CATTACATGA TACAGAAATT GTACGTACAA     120

TGGCAACAGG TATCGCTGGT TTATCAGTAG CAGCTGACTC ATTATCTGCA ATTAAATATG     180

CACAAGTTAA ACCAATTCGT AACGAnGAAG GTCTTGTAGT AGACTTTGAn ATCGAGGCGA     240

CTTCCCTAAA TACGGTAACA ATGACGACCG TGTAGATGAT ATTGCAGTTG ATTTAGTAGA     300

CGCTTCATGA CTAATTACGT GGTCATTAAA CATATCGTGA TTCAGACCTT CCATGGGnGT     360

ATTACCATTA CTTCAACGTG GTnTCGGGTA GAAACTGGGT                           400
```

(2) INFORMATION FOR SEQ ID NO: 3031:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 319 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3031:

```
nGCGTTTAAT CACATCTTTT TGATAATGTT CCCTTACCAT TTCTTCATGT GCATCTGCAT      60

AGTCTTTTCC AAATGGCAAA CTAAACTGAT ATGCAACTTT TAAATAGGCA TCTATATGCG     120

ACTCGTCAAC GATGGCAATT TCAACGTCnA GTTACGCGGA CAAATTGGCA AGCGCATCAC     180

TTTCTATGGC ATACAATTCC ATAATACCTA GTTCAAAATT CATATCTTTA AAACATAGCC     240

ATCCAATGGA TTATCAAGTT GTTCATTTTC CGGGAAAACT nAAACGCATA AATGATTTGG     300

AACCTTGATT TGTATGTGA                                                  319
```

(2) INFORMATION FOR SEQ ID NO: 3032:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3032:

```
AAGAAGTGGC AATTATGATT GATGCTCTAG CTGACAAAGG GAAAAAAGCA TTAGAAGCAT      60

TATCTAAAAA GTCACAAGAA GAAATTGATC ATATTGTTCA TCAAATGAGC TTAGCAGCTG     120

TTGATCAACA TATGGTGCTA GCAAAATTAG CACATGAAGA AACTGGAAGA GGTATATACG     180

AAGATAAAGC GATTAAAAAT TTATACGCTT CTGAATATAT ATGGAATTCA ATAAAGACA      240

ATAAGACAGT AGGGATTATT GGTGAAGATA AAGAAAAAGG ATTAACGTAT GTAGCGGAAC     300

CAATTGGTGT TATTTGTGGT GTTACCGCCC AACCACCAAA TCCCTACGTC CGACCACCTA     360

TTTTTAAAGC CGATGGATTT GCCATTTAAG ACnGGGAATC                          400
```

(2) INFORMATION FOR SEQ ID NO: 3033:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 303 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3033:

```
TAGCGGTAAT CGAAATTGGG GACTAAATTT CGCAAAGCG GGTCGCACGA TATCAGAAGA       60

GTATAATGTC CCTTTATTAA TGAAGTTTGA GTTACATGGA AAAAACAAAG ACGTTATTGA     120

ATTTAAGAAC AAGGTGGGTA ATTTTAATGA AAACCATGGA AGAGAAAAAG TACAATCATA     180

TTGAATTAAA TAATGAGGTC ACTAAACGAG AGAAGATGGA TTCTTTAGTT TAGAAAAnGA     240

CCnGAGCTTT AGTAGCTTAT TTAGAGGAGT AAAnGACAAA ACATCTTCTT CGACACTGAA     300

TCG                                                                  303
```

(2) INFORMATION FOR SEQ ID NO: 3034:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 340 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3034:

```
CTnCGCTATT TTGTAGGACA TCTTCTAAAG TGCTAGGnGA AGAGATTATA GAATAGGCAC       60

TATCAATACC GAAATCGTAA ACATGTTGAT AATTTTCGCC TAGACTGCCA CAAATCGCGA     120

TGACAGGAAT ATGATATTGT TTTGCAGCTA ACGCAACGCC TGACGGGTGT TTTACCAAAG     180
```

TGATGAAAAT CTGTAATGTC AAAGACGGAC ATCAATGACT TTTGTTGAAA GTTGTCTCAC   300

AAAACGnTAA TGAATGCTGC GGCCCATGAC CGGCCAGCTG   .   340

(2) INFORMATION FOR SEQ ID NO: 3035:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 303 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3035:

AAAGAACATG GTGTAGCAAT AGTCTCTGGA GGTGGAAGCG GACATGAACC TGCGCATGCC   60

GGTTTTGTTG CAGAAGGTAT GCTAGATGCA GCGGTTTGTG GCGAGTATTT ACATCACCTA   120

CACCTGATAA AATATTAGAA GCTATTAAAG CAGTAGATAC TGGTGATGGT GTATTACTAG   180

TTGTAAAAAA CTATGCAGGT GACGTGATGA ATTTCGAAAT GGCACAAGAG CTTCCAGAAA   240

TGGAAGGTAT AAATGTTCAA ACTGTTATTG TTCGTGnCGn CATTGCTGTG ACAAACGnGT   300

ACA   303

(2) INFORMATION FOR SEQ ID NO: 3036:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 315 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3036:

GGGGAAAGTA AATTAACAGC TGTGTAGAAT AATTAAGGTT TTAATTTATA TAGAACAACT   60

TATTGTAAAC TTTTCATTTC TTAAAGTTTA CAATGGTGCT ATAATAATGG TCATGAAATA   120

CGAAAGGAAG GAAAAAATGA CnACAAAACA GTTAGTATAT ACAGCTTTAA TGACAGCGAT   180

TATCGCTAGT TTAnGATTGG TACCGGTAAT TCCACTACCA TTGnCTTCAG TACCAATTGT   240

ACTTCAAAAC AGTGGTATTT CTTAGCAGGG GCGATTTTAG GACGTAAATA TGGCACATTA   300

AGTGTTATCG TCTTT   · ·   315

(2) INFORMATION FOR SEQ ID NO: 3037:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 330 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3037:

```
GCACCAATTG ACGAAGGAAT ACCGAATCCC ATTGTTCCTA AACCACCGCT TGTAACCCAT      60

TGTCCGTGAT TTTTAAATGG ATAAAATTGA GCTGCCCACA TTTGATGTTG TCCCACGTCT     120

GTAGTAACAA TTGCTTCACC ATTTGTAATT TTGCCGATAT ATTCGATTGT TTGTTGTGGC     180

TTACAAAATA CTTGATCTTC TTCACCAAGT TTAAATGGGT GTTTCTGCTT ATTATTTTGA     240

CAATGTTTAA CCCAGTCACT GTGTTCTATA GTCTCAACAT TTTTATCATT TAAACCnTCC     300

AAAAAACCTT TACAnGCCnG CAAAAAAACC                                      330
```

(2) INFORMATION FOR SEQ ID NO: 3038:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 334 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3038:

```
GTGAGTCCAC ATAATAACTT TGACGTCCTG TTAATGTTCT AAAAGGTACT AGACGTTCTA      60

TATTCGTTGT AAATGGTGAA TATCGTCGAC CTTGTTTATT TGAACCTGGG AATACTGCTG     120

TCGGTATTAC TTCTCGTGGT TGTGAAGTTA TATTTAAAAA CGAAATTTTC TCAGCAGCGC     180

TGTCGCTAGA AATATCTTTT AACGGCATTC CAGTTTGTTC TTCGAGATCT TCATATGGAT     240

TTTTGTGnAT AATTnACCAT TCGTAGCAGA TGGAAATACT TGAGTATnGG CATCAGCGAC     300

ATTGACGTGC TGTATCAATA CGTGGACGAT TCGC                                 334
```

(2) INFORMATION FOR SEQ ID NO: 3039:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 327 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3039:

```
GGTCTGATCG TGGTGAATGA AAAAGGTTCT TCTCTGTAAT GAATTATCTC TTACCGATGC      60

AAGATATTAT GAGCATGCAT TGCTCAGCAA ACGTTGGTGA AAAAGGCGAT GTTGCATTAT     120

TCTTTGGTCT ATCTGGCACT GGTAAAACAA CCTTTATCGG CTGACCCACA CCGTAAACTA     180
```

ATGCAAAAGC AATTAATCTT TCCAAAGAAA AAGAnCCACA GnTTTTTGGA CGCATTCAAA 300

TATGGTGCAn TTTTAGAGAA CACTGTA 327

(2) INFORMATION FOR SEQ ID NO: 3040:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 305 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3040:

GTGATATTCA CGAnCGTTAT TTTCAATATT TGATAAGTAG AAAnTATGAC GATCTTCATG 60

AACAGCATCT TGTTCTTCGT CAAATTCAAC GTCATCAAAA CGTTTGAAGA ATGTTTCATA 120

TGCATCAACA GATACTTCAG TACGGTTATT TAATAATGCT TTATGTGCAG CTTGGATCTA 180

AATGATCTTT GTAGCCTTCA ACTnAATGTC GCACTATAAA ATTCACCAAC TGAACCTGAG 240

CCATAACTGA ATAAACCGAT TGTTTCCACC AGCTTGTGAA TCTCGATTTT CAAGTGAATG 300

ATATT 305

(2) INFORMATION FOR SEQ ID NO: 3041:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 317 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3041:

GTTGTGTACC TTAAATGATC AACCGATGCA TAAGAAGAAA GTGAGACGTC ATCAAATTGG 60

TGCTGTATTT CAAGATTATA CGTCATCATT ACATCCATTT CAGACTGTTA GAGAAATCTT 120

ATTTGAAGTG ATGTGTCAAT GTGATGGACA ACCTAAAGAA GTTATGGGAA GTCCAAGCAA 180

TTACATTGTT GGAAGAAGTC GGTCTATCTA AGGCATACAT GGATAAATAT CCTAATATGT 240

TATCAGGTGG AGAGGCGCAA CGTGnTGCAT nTGCGCGTGC AATATGTATT GAACCCnGAA 300

ATATATTTTG TTTGGAT 317

(2) INFORMATION FOR SEQ ID NO: 3042:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 351 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3042:

```
AATCTTCGAA AAATAATGCA ATGCAGATTC CGAAAAAAAC AATATGATAG AAACACCTCA      60

ATTAAATACA ACGGCTAATG ATACATCTGA TATTAGTGCA AACACAAACA GTGCGAATGT     120

AGATAGCACA ACAAAACCAA TGTCTACACA AACGAGCAAT ACCACTACAA CAGAGCCAGC     180

TTCAACAAAT GAAACACCTC AACCGACGGC nATTAAAAAT CAAGCAACTG CTGCAAAAAT     240

GCAAGTTCAA ACTGTTCCTC AAGAAGCnAT TCTCAAGTAG GTTATTAAAA CACGGATGGT     300

GCTAATAGCT TnGCAACAAC GTGGGCTTTA AAATTCTCCA ACTTTAGTTT T             351
```

(2) INFORMATION FOR SEQ ID NO: 3043:

    (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 319 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3043:

```
ACGnCCTTAC TGGnTACTTG GTTGATAAGT GTTAATCCAA ATGACGTCCT GCTACGTACA      60

GCTTTACGAA TATTTAATGC ACGTGTGATA TTTTGAGAAA ATACACCGCC TGGCTAAACC     120

ATACTCAGAA TCATTAGCTA TATCAATTGC TTCTTGATCG TCCTTCACTT TAATCACTGT     180

TAACACTGGT CCAAATATTT CTTCTTGTGC TAATTTGTGA TGATTGTCTG GCACnCAATT     240

AATGTCGGCT CAAAGAAGAA CCCTTTATCT AATCCATTTT CAGTTAAGCG ATGACCGCCT     300

GCTAAAATTT GTGCATCCG                                                 319
```

(2) INFORMATION FOR SEQ ID NO: 3044:

    (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 342 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3044:

```
GTCATATAAT CTAACATTTG TGTTATCTGT TAATTAACTG GnTTTTACCT TAATTTGTTA      60

CATTGnTCTG TATTAAATCT TTTTGTAACC ATTGGTTACT TTTTCAGGTG GAATTTCAAC     120

ACCCATGTCA CCACGTGnCA ACCATTAAAC CATCAGACAC TTCAAGAATT TCCGCAATAT     180
```

AAATTCACGA ATTTCTAAAA CATCACTAGG TACGACGTAC GAAACTTGCT GCAATGAAGT   300

CAACATTTTC TTTAATACCG AAACGGATAT CTTCAGCATC TT   342

(2) INFORMATION FOR SEQ ID NO: 3045:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3045:

TAATATCATG TTGTGCTTTT AGTGCTTCGG CAATTTGTTT TGTACTTACT GACCCAAACA   60

ATTTACCACC TTCACCAGTT TTTGCTGATA CTTCAACTTC AATGTTTGAT AACGTTTCTT   120

TTAATGCTTT ACATCTTCAA TTTCTTGTTG GCGTTCTTGT TTTGCACGTT TTTTCTGTAA   180

CTCTAATTGT TTAAGGTTAC CTGGTGTTGC TTCTACAGCA TAATTCTTTT TCAATAAGAA   240

GTTATTTGGC ATAACCTACT GGTACTTCTT TAACTTCACC TTTTTTACCT TTACCTTTAC   300

CTTTAACAnC TGTGTAAAAA TTACTTTCAT GCAGnTCACT CCTACTTAAA TGTTCCGTAA   360

TGCCTGTTGT AATGTGCCAA CGCCnCTCGA CGTGACACCT   400

(2) INFORMATION FOR SEQ ID NO: 3046:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 306 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3046:

AATCACTGTT TCATTACTTG TTCCAAATCT GnATTCAAAC TATTGTTCAA AGATTCTAAT   60

TCCGCTTTAT TTTTATCTTT AATCGCTTTT. GTCATCGCAG CATCTTTAGn CATCGACTTn   120

CTGTTGCAAT AGTTTAATTT TAGAACCCGC ATCTTTACTA GCCAATTTCT CTTCATAAGC   180

AATTAATGAC TTCGTTAATT GCGAAAGTGT ATCTTTTTGA TTATCATTCG CTTTTGCATC   240

TTCAAGCTTT CTCACATCTG CATTTGACAG CATTACTTGC ACTATTATCT TCAAGCGATA   300

ATTTCT   306

(2) INFORMATION FOR SEQ ID NO: 3047:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 306 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3047:

ATGGATCATA TTAGCACGTA AAAGAAAATT CTGTTCATTA TGAAGAAGTG CCAGANGTTG   60

10

AATTTAAACG CACATATGTA TGTGAAGATA TGTCTAAATG TATTTGTTTA TACAACGCAC   120

CTGATGAAGA AGCGGTANTC GCGCGCGCAA AGCAGTTGAT ACACCGATTG ATGGCATCGA   180

AAAACTTTAA TAAGACAACA AGTTGATGAG ATATATGTAT ATAGGTTTGG CATGGATTTC   240

15

GATTGCANTT ATTAGAATAG CTCAATGCTA TAAATGTAAG TAGTTGATAT TGAGGAACTA   300

ATGAAC   306

(2) INFORMATION FOR SEQ ID NO: 3048:

20

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 287 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

25

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3048:

30

GACAGGCTAC GAGATATTTT AAACAAATTT ACATCAAATC CAGTATTAGG TGTTATTGCA   60

GGTATCGTTG TAACTATTTT AATACAAAGT AGTTCAGGTA CGACATTATC ACAATCGGAC   120

TGGTAACnCT GGATTTATGA CATTGAAACA AGCCATTGGA GTGATAATGG GTGCTAATAT   180

35

CGGAACANCG GTAACTGCAT TTATTATCGG TATAGATTTA GGCGAATATG CAATGCCAAT   240

TTTAGCATTA GGTGCATTCT TGAATCTTTT TCTTTAAACG CTCTAAA   287

(2) INFORMATION FOR SEQ ID NO: 3049:

40

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 371 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

45

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3049:

50

CATATAAATA GCGnTACATC GCGCCATTCT TGATCTGnAC ATATCTTTCT TAGGTCCAAC   60

CGTGAATGAT TACGTCCATG ATAACGTACA AACGCAATTT CATTTGTGAT TCGATTGACT   120

AAAGGTACAC TGCCATCTTT CACTTGTGGT TCATCAACTA CTGCATGAAT GATTTGATGT   180

55

AATTCTACAC ACATTGGAAA GCTTGTAATG CTGTCTTACA TACAAATATA TTGATATTTG   300

TGCATGCAGT CAACCAGGCG GAAATGACCA TACCATGCTA ATTTTCTGGT AnGAAGGCCT   360

ACATATCTAA A   371

(2) INFORMATION FOR SEQ ID NO: 3050:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 323 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3050:

CGCCAAATAA AGATAATACA CGTATTGGTG AAGATATAAC TGTAACTGCA CATATCTTAA   60

TTGATGGCGA AACAACGCCG ATTACGAAAA CAGCAACATA TAAAGTAGTA AGAACTGTAC   120

CGAAACATGT CTTTGAAACA GCCAGAGGTG TTTTATACCC AGGTGTTTCA GATATGTATG   180

ATGCGAAACA nTATGTTAGG CCAGTAAATA ATTCTTGTCG ACAnATGCGC AACATTGAAT   240

TTCCAATTTG TTGGAnCATA TGGGCTAACA AGGTGTTTAG GCATATCTAC TCGTCTTATT   300

GGGTGCATAT GTAATGGCAA GCA   323

(2) INFORMATION FOR SEQ ID NO: 3051:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 325 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3051:

CCGnACCAAT CGGTTTACAG TTCATTGGTA AACCATTCGC ATGAAAAAAC GTTATATCGT   60

GTCGCTTATC AATATGAAAC ACAATACAAT TTACATGACG TTTATGAAAA ATTATAAGGA   120

GTGGAAATCA TGCATTTTGA AACAGTTATA GACTTGnGTT CACGTAGAGT TAAAAACGGA   180

CTCAAAAATG TTTCTCCATC ACCAGCGCAT TTnGAGCAGA ACCTAACTCA AATACGAATG   240

GTATCGCTTA GCATATCCAG TGCTTACCAG TTGTTAATAA GCGTGCGTAG ACGGGCATGC   300

GTGCTGCAAT GCCTAAATAG GAACG   325

(2) INFORMATION FOR SEQ ID NO: 3052:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3052:

CTTTTAATCG CTTGAAAACT ATAGGTAAGA CAATACAAGT AGCTACAAAG CCATATATTA   60

10

CTGTTAATTG ACCTATGAAA AAATATCCGC TAACGGGTGC CGTCAATCCT GCGATAGCAA   120

TACCAATAAA AAGTACAGTC CACGAAGGAT AAACATTTTC AAGTGAAAAA TCTTTTAAAT   180

ATTTTATTGA AAAAATAATC ATATGCGTCA TAATTCCCAC AAGGCATAAA ATCCAAATAG   240

15

GCGTATTAAG CTATTGTAAA GTTTGTTACT AAAAAATGTT TTAAATAGTG TnCTAAAAAG   300

CCGGCATGAA AATGTGTGAC CTGATGAACT GAGGCTGTTA TTGTCTTCAC TTATTAAATT   360

TGTCTAGTCT AAAGGTGATC CAATCAGAAG CAAGTCCGCA   400

20

(2) INFORMATION FOR SEQ ID NO: 3053:

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 367 base pairs
          (B) TYPE: nucleic acid

25

          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3053:

AATGAGATGC GAAGGATGAT CAGAGAAAAA GTCTCTCAAT CAGGTGTGAA AGTCAGATGG   60

TTATCACAAC TTTGGCGTAC GTTTTCGATA TAATGCACTA GGTGATTTAA ATACGAGCAA   120

35

TATTGTTTCT TCAAAAGAAA GTTTCGGTAT TACTGAAGTG TGAAATCTGT CTCTATGCAT   180

GCCGGATCGA CATTAGCATT ACTAATCCAG AGAAAGCAAA AGGTATTGTG TATACACCAG   240

AACATTGCCA GCGAAAAGTA AATGGTCACA GCTGTAGAnC AAGGTATTTA TAATGGGGGC   300

40

GGTAAAGCAG AAGGCCCCTA TGTAGCATTT CnTAAAGnTG GGAAAAGGTA AAGCAGCATT   360

ATCGGTG   367

(2) INFORMATION FOR SEQ ID NO: 3054:

45

     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 382 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3054:

55

TnATTTATCT nAGCTCATGA CATGATGGCT GTTCACATTG CAAGGCGTTG ATGATnAAAT   120

AAGGAAAGGC ATTAGGAAAA AGCCACAGGG AAAACATTTC AGCAGCAGGT TCTTGGAATC   180

ATATATTCAA GTTCAACAAG CGAATGCTGT TAAATTGCCC TTTGGATGAC AATCAATTCG   240

ATATCGTTTT AAATGAAGCA ATGTTAACAA TGTTACCCAT CGCCATAAAG GAAAAAGCAT   300

TACGCGAGTA CTACCGAGTC TAAAGCCTGG GGGTATCTGT TAACACATGA TATTGTCATC   360

GTTAATGAAT CACATGCCAC AC   382

(2) INFORMATION FOR SEQ ID NO: 3055:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 316 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3055:

CTTAAGATTA GGTGTGCTTA ATTAGTACTG GCTGGGAACG ATAAAGGCAT ATTGCAAAAA   60

ATAGAACATC CATATCCATT AAATGTATTT ACGCTAAATA TTGnCGACTT ATATTTTTAG   120

ACATAGAGAA GAGACAAGAC AATTTTTAAC GATGCAACGA CAGTTAGGCT GAGGCAGTTA   180

AAACAAATAT TTGATACACA TGTTGnCAGA TAAAAGTCAG TGTTCCCATC AAATGCnAAT   240

TTTGTACTAC TAAAAGCTCA GCAGCGCAAC AATTAGGACA ATACGTATAT GAACAAGGGA   300

TTTAAACCTC GCTTTT   316

(2) INFORMATION FOR SEQ ID NO: 3056:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 380 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3056:

GTTCACCATC CGTTTATTTC AATGAAAAAA TCGACAAAAA TGGTCGTGAA AACTATGATG   60

CAACAATTAT TCCAAACCGT GGTGCATGGT TAGAATATGA AACAGATGCT AAAGATGTTG   120

TATACGTACG TATTGATAGA ACACGTAAAC TACCATTAAC AGTATTGTTA CGTGCATTAG   180

GGTTCTCAAG CGACCAAGAA ATTGTTGACC TTTAAGTGAC AATGAATATT ACGTATACTT   240

AGAGAAAGAC nGCACTGAAA ACACTGACCA GCGTATTAGA ATCATGACGT TACGTCCAGT   300

CTTAGCAGCG TGGGnCGTAT   380

(2) INFORMATION FOR SEQ ID NO: 3057:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 327 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3057:

TATGTGATGG ACTTAAAAAA ACGAACTCAA TTAATACAAT GGGCTCAAGA AAAAGAAGAA   60

CGATTTATTA TAGAAGATGA TTATGATTCC GAGTTTAGAT ATTTCGGCAA ACCCATTCCA   120

GCAATTCAAG GTCTATATTC AAGAGGAGAA AAAGTGATTT ATATCAGTAC ATTTTGCAAA   180

GTCTATTTTT CCTAGCTGTT CGAGTTGGCA TATATGGTGT TACCCTATTC TATnATGGAA   240

AAAATATCAT TTCTnCAAAA TCCACCATTG GAAGGGCAAC ACTGGTAACC TGTTTCATAT   300

GGCAAAACCT TATTGGCAAC GTTTnAT   327

(2) INFORMATION FOR SEQ ID NO: 3058:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 284 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3058:

CGAAAAAGGA GAATGAAACA TGAGGTAATA CAACATTACA TGCAACAACA ATTTATGCGT   60

GTAAGACATA ATGGAAAGCA GCTATGGCTG GAGATGGGCA AGTAACGCTT GGTTCAACAA   120

GTCATCATGA AACAAACGGC AAGAAAAGTG CGACGTTTAT ATGAAGTAAA TGTTAGCTGG   180

TTTCGCAGTA TGTAGCAGAT GCGTTTACTT ATTTGAAAAA TTCGAAACAA nATTACAACA   240

GTTTAGTGGT AACTTAGAAA GAGCnGCTGT TGAATTGGCA CAAG   284

(2) INFORMATION FOR SEQ ID NO: 3059:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 302 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

AAAGAAGCGG ATGAAGAGCT TTGCATTGAG CTCGACCCAG GTATGGCTTT TGGAACAGGT 60

GATCATCCGA CTACAAGTAT GTGTTTGAAG GCAATAGAAA CATATGTATT GCCACAGCAT 120

TCAGTAATTG ATGTTGGTAC TGGCTCAGGT ATATTAAGTA TTGCAAGTCA TCTAATCGGT 180

GTAAAACGTA TTAAAGCGTT GGATATTGAT GnAATGGCAG TGAGTGTAGC TAGAAGAnAA 240

CTTCAGAAGA nATCATTGTG AACGTTGAAT TGGAAGCTGT TCCAGGTTAA CATATTGGAA 300

AG 302

(2) INFORMATION FOR SEQ ID NO: 3060:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 330 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3060:

TTTTTAAnGA CACATTGnGC TGTGTTTAAT GCATGAAAGG AACCACTGAC ATGCATnAAA 60

TCTTTGAATG GTTCTTTATC AATTCCTTCC CCCCTCTCAT GTTTTGTATC TTTAAATCAA 120

TATAATTCAA AAAGGGTCGA GGATATGAAA TCACATCTTC GACCCTTTAT TTACTATTTT 180

AATTCAGCCA CACGCAAACG GTTATTTGCT CTCTCTAAAG CTCTTTCGGC TCTATGGAAT 240

ATCAGTATTG TCGTCAATCA TTTTCCAAGT GAGACTCTGC TCTTGCTTTG GCTAATTTAG 300

CTCTTTCAAC ATCAATTTCT CTTGCAGTTC 330

(2) INFORMATION FOR SEQ ID NO: 3061:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 301 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3061:

CGATCAATCA ATATAATTCA CGGCGCAAAA CGTTTATTTA GCATGTTCTT GCAGACTCTG 60

AAACTGGCAT TAAACCTTCC ATTAAGATTT TTACCATTCT AGGCATTAAT ACCATTACTG 120

CAGCCATTGA CATTCCTAAA TTAATGATGT CTCCAGGTTT GTAACCTGCT AAcACACCAA 180

TACCTAAmCC TAAAATTAAG CCGACAAATA TAGACTCTCC AAATGCGCCA AAACGTTTTT 240

GAATTGnTTC AGGATCAGCA TCTAACTnAT TCAGACCGGG TACTTTTTGT AACAATTTAA 300

(2) INFORMATION FOR SEQ ID NO: 3062:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 350 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3062:

```
TATAAAATCA ATGATTTTAA CAAATAAAAA CGTACCGCAA ATACTGCAAA TAACAGCAAA      60

TACTAGTTTT AATAAAATAT GACCGGTTGG AAAGAACAAT AAAGCAATTA AAATACCTAG     120

TTTAGCCCAT TCCATCGTTC CAGCTGTAGT CGGACTAACA AACTTATTTT GCATCATTTG     180

TTGGCATTAT CAAGCCTGCT GAAAGCCAAC GAACTTCCAG CAATTAAAAT ACTCATCGTC     240

CTTGGTATTC GGGCTTGGAG AATAAAATGA TTCCGCTGGT GACTCAGTTG AAATGTAGTG     300

AAATCTTTGA ATTGGATAGT TnCACTGCAC ACCTGATGGn AnCAACGGAA               350
```

(2) INFORMATION FOR SEQ ID NO: 3063:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 342 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3063:

```
TTAGTGATTT TAACGTGTAT CGGTAATTTT AAATAAATGT TTAATGCTTT TGAAAATACA      60

GTTCTAACCG AAGACGTCGG GTACACTGAA TCACCGGAAA CGCCAAGGTC TTTTATTAAA     120

CCTTGTTCAC TATATTGCAT ATACTGTGGA TGCTGTCGCA ACACATTGAT TTGATAAGGA     180

TGTGTTGGTA ATAAAATAAA ATCTTTGGGT ATCTCTGATA TATCTATGTC TGCTAATTGG     240

ATACnACACT TTCTCAACCT GGATCCTTCC TTTTACCTnC CACCATAGCC GCGTGGAnCA     300

GGAAACCATC CTGGGATGCA CCAGCCAAAA TAAATGCCAA TT                       342
```

(2) INFORMATION FOR SEQ ID NO: 3064:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 316 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

```
GTCCAGCTCC AGAACCAAAC TTAACAGTAT TATGGTCAGT ACGTTTACCT GACAACTTCA        60

AAACATACTG TGCAAAAATG AGTATTAAAA CAAGTTCTAT CCAATATGAA AATGATGACA       120

TTATGCGTGA AAGCTATGGC GATGACTATG GTATCGCnTG TTGTGTATCA GCGATGACAA       180

TTGGTAAACA AATGCAATTC TTCGGTGCAC GTGCGAACTT AGCnAAAACC TTACTTTACG       240

CTATCCATGG TGGTAAGATT GAAAATCTGG TGCACAAGTG GGCCCAACCT CCGAGGGATT       300

nACCAGCGGA GTAATT                                                      316
```

(2) INFORMATION FOR SEQ ID NO: 3065:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 322 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3065:

```
TGATTGCGTG GATCAGCAAC TTCAAAGATT AACAAATAAT ATTACTTGGG CAGATAACCG        60

CGCTGCAAAA TATGCAACAG TAATAAATGA AGTGCATGAT GGGCAATGCG ATTTACCAGC       120

GnACAAGCAC AnCGGTTTCA TCCTATGTCG CCATTAGCGA AGATTTTTGG ATGAAACATG       180

ATGGCCAGAT GTATTTCCAC GTACTGCTAA GTTTGCAGAT ATTAAAACAT ACATTTCTAT       240

CATTATTGAT ACATATATCA TTGATTATTC CATGGCTTCC GCnACAGGGA TGTTAATTAG       300

AACATAGATT GGAGTGAGGC AT                                                322
```

(2) INFORMATION FOR SEQ ID NO: 3066:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 373 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3066:

```
TATAAAGAAT CCTGCCTTAC CTAAGAACAC TTGTCTTGTC GTTAAGACTG ACTCTAGACT        60

CTTATGTTTA TTATCAACCG TTAATAAACT TACCATCAAG AGTGCACCTA CCCATACTGA       120

CAGTGCAGTA TAGAATGGTG TCATACCTGA ACCATAATCC TTAACTGGGA AAACATCAAC       180

AGTCTTCTTA TTAATAGATT GCAATAATAC CCGCTGCTTT TTCAAATCAT TCTAnTGGTC       240

GATTAATTGT CGACGCATCA TCTTGTCAAT TCTTGAAATT TATTCGCTTT TCAACTTTCA       300
```

CACGCTGACA TAC 373

(2) INFORMATION FOR SEQ ID NO: 3067:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 311 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3067:

TTCAGAGTTC GGAACATAAG GCGCTACAAT GTTGTGTTGC CAGTAGTTGA CTGAATATGC 60

GTTTGTAACA AGCTTTTTTC GATTCTAGTC AACAGTAATT AAATTTATGA TATGGGCAAT 120

ACTTTGTAAT ACTAATATTA AATGGCGACT TTATTTCACT ATGTTATAAG AGTGCCATTT 180

GTTGATAAAG GnATACTAAA GGGTATCGTT TGGAATTTTA GTAACTAGAT ATGTTCGGGT 240

ATAGACCGnA TTGTGGATAC GTAAATTTAA TGCnATGAAT TTTAAAATGA AAACATGACA 300

TTAAATGAAT C 311

(2) INFORMATION FOR SEQ ID NO: 3068:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 275 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3068:

TATGATTATC TAGTAAGTAA ATTGCTGACG CGCCGAATAC CGCAAAGAAT ATAAAGCAAA 60

CTAACGCCGG GACAAAAAGT ACACCTAGGA ATAAATTCTT TAATCGTACG TCCTTTTGAC 120

ACACGTGCAA TAAnATACCT ACAAATGGGT GCCCAGGnTA TCCACCATGG CCCAGTAAAA 180

GATTGTCCAA TTTTGTAACC ATTGGGAATT TTTGACCACC TGTCGGAATG CGTAAACTCA 240

TACTTAAAGA AATTTGCATT ATAATTACCT AGACC 275

(2) INFORMATION FOR SEQ ID NO: 3069:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 321 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

AAATGGGTTC TGTGACATTA ACGTCTACAA AAGATGGTTC AGAAGAAACA CACGAGGCTG   60

ATGGTGTATT CATCTATATT GGTATGAAAC CATTAACAGC GCCATTTAAA GACTTAGGTA   120

TTACAAATGA TGTTGGTTAT ATTGTAACAA AAGATGATAT GACAACATCA GTACCAGGTA   180

TTTTTGCAGC AGGAGATGTT CGCGACAAAG GTTTACGCCA AATTGTCACT GCTACTGGCG   240

ATGGTAGTAT TGCAGCnCAA GTGCAGGGAA TATATTGACA TTAACGATCA GCCTAAnTCC   300

GAGCnGATTA GATGTGAGCG G   321

(2) INFORMATION FOR SEQ ID NO: 3070:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3070:

GTTTGACCTG CATATTTGAC AGTCATAACC TTTGTATCAC CATTATATTA ATATCAAAAT   60

CTTGGAACGT GTTATTTGAG nTGACATTTA ACTTCGCAGC ATTATCAGCT GTTGAACTTG   120

ATGTATACGT TGCGCAACCC ATAACTATCT GTGTTACAAT GCACCAAACG CACCTCCACC   180

AGCTACATTA GATGGGCAGC TTCGCCTTGC AGCTGATTGG TTTAGATGAT TGTGATACGA   240

TCCAATTTGA AGCCAAATnG TACTTAAGCA CAATCCTACT GCGGACCGTT TAACCCTGTT   300

TCACCTATAC ACTGnTGAAA GGCAAACCGT ACCACTCACC ATTTCCATGC CTTCCATATT   360

TGGTTACCAA ATTTACTTTT CCCnGAAAAA TGAAACTCTT   400

(2) INFORMATION FOR SEQ ID NO: 3071:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 266 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3071:

TGGCCATTTG TCATTGCATT TTTACCGTGG GTGTTGATTA TTATTCCTTA CTTACTATTT   60

AAATCGGATA CACTAAATAT TATTCATACG GGTGATAATA TTGCACGAGG TCTAGGTGTA   120

AGGTTAAnCA GAGAACGTTT AATATTATTC TTTATCGCAG TGATGTTATC ATCTGCTGCT   180

GTAGCATAGC AGGTTCAATT TCGTTTATCG GATTAATGGG TCCGCATATT GCCAnACGTA   240

(2) INFORMATION FOR SEQ ID NO: 3072:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 319 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3072:

```
GACTCCCTGC AGGTCGACGT CTAGAGGATC CCCCCACAGC AATTCACTTA TACATGTAAC        60

AGTGTGAAAT AATAACGTCA CAACGGCATA ATACACATTG CAACGTCCCA ACAACATATC       120

ATAGAATCGT AACGGCATGA CATCAACACC AAACCTGGGC TATAACACCA TAACAGCGCA       180

ACGCCACATC ATAGGCACTA CATCAAGTCG CATCGTAGCA CCAGCACATC AAAGTAACAT       240

GGGCATCAAC ATCAAACCGG TCTATAACAC CATAACACCG GCAATGCCAC ATTCATAGGC       300

ACTACATCAA GTCGGCATC                                                   319
```

(2) INFORMATION FOR SEQ ID NO: 3073:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 282 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3073:

```
ATATACGCTT ATCAGCTGGA GCTCAATAGA TGGAGGATGA TTATGGGGCT ACCGGTTCTG        60

TCTATAGCAC TGGTCTATCA GCTATGTGGA TTACAATCGG TTTAACATTA GGTGCTTATA       120

TAAATTACTT TGTTGTTGCT CCTAGACTTC GTGTTTATAC CGAATTAGCT GGAGATGCAA       180

TTACATTACC AGATTTCTTT AAAAATCGTT TAAACGATAA AAATAATGTG TTAAAGATTA       240

TTTCTGGATT GATTATCGTA GTATTCTTTA CATTATATAC nn                          282
```

(2) INFORMATION FOR SEQ ID NO: 3074:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 396 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3074:

```
AATCGAnAAA TCATGGATGT ACTTGAATCA AATGCAAACA GCGAAGTGTn TTGAATTGCA          120

TGGTAGCGTT ATAGACGAGC CAGTAGAAAT TCAATCAATT AAAGTATATG TTCCTAACGA          180

TGATGAAGGT CGTACGACAA CTGTAATTGG TAATGCTTTC CCTGACTCAG AAGTTAAATG          240

CATTACACCA GCAGATATCA TkGCTTCAAT GAGTTACTTC TTTAACTTAT TAAGCGGtAT          300

TGGGtATACA GATGATATTG GACCATTaGG TAACCGTCGT TTACGTTcTG tAGGkGGaAT          360

TACTACmAAA CCaATTCCGT ATCgGTTTAT CCAAGA                                    396
```

(2) INFORMATION FOR SEQ ID NO: 3075:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 376 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3075:

```
ACCTACATTT GCAGTTGTCG GTGTATAACC GGCTGGTGTT GAAAACTCTA CACTATAAGT          60

TCCATTGCTT AAACCAGTGA ACTGATATTT ACCATTTTCA TCTGTTGTCG TACGATCTAA          120

TTCTTTACCG TTACTATCTT TAAGAATGAC ATAAACACCT TTAATCCCTT TTTCATTGGC          180

ATCTTGTTTA CCATCTTTAT TTGTATCTCC CATACATAGT CACCTAGATT ATATTCnTTT          240

GGGCGCCATA GCAGTTGATG AGCATTCACA TTGAAAAACT ATTGACCACT ATATTAGTTT          300

GCAGTGCTAA GnATAACATT TCCATACGTG ACATACTGAT AGACTGTGAG TGATGTATGC          360

GCTGnTGCTC ATAACG                                                          376
```

(2) INFORMATION FOR SEQ ID NO: 3076:

      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 331 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: double
          (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3076:

```
TTACATCACC AATTAGACGT TATCCTGATT TAACAGTTCA TCGTTTAATC CGTAAGTATT          60

TAATTGAGAA ATCAATGGAT AACAAAGAAG TGAAGCGTTG GGAAGACAAA TTGCCTGAGT          120

TAGCTGAACA TACTTCTAAA CGTGAACGTC GTGCTATTGA GGCAGAACGT GATACTGATG          180

AATTGAAAAA AGCAGAATAT ATGATTCAAC ATATTGGTGA TGAATTTGAA GGTAATGTCA          240
```

AAnGCnGnGA TATACGTTTG AGGCGCAATG C   331

(2) INFORMATION FOR SEQ ID NO: 3077:

      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 345 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3077:

AATCATATGC ATCGATTTCC AGCAACAGCA ACCATTCATC CTATGTCCCA TTAGCAAATT   60

TTTTGGATGA AACATGAATG GCAAGATGTA TTTCAACGTA CTGCTAATTT GCAGATATTA   120

AAACATACnT TTCTATCATT ATTGATACAT ATATCATGAT TATTCATGGC TTCCGCAACA   180

GGATGTTTAT TTAGAAACAT TAGATTGGGA TGTTGAGGCA TAGAACTGCT GGGTATTTCC   240

AAGGAAATGT TGCCGGAATT ATTCCAACAA CTATTGATGT AAGTATGAAA GAACGTATGC   300

AACATAATGG GCTAATAAAG TACACCGTnT GTTAATGGTG CnATG   345

(2) INFORMATION FOR SEQ ID NO: 3078:

      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 400 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double
           (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3078:

GATTATCAAG CGATTGATCA AGTATCATCA TTGTTGAAAG AAAAATATGG CATTGCACAT   60

TCAACGTTGC AAATTGAAAA CTTGCAATTG AATCCATTAG ATGAGCCATA CTTCGACAAA   120

TTAACATAAA TAAAACATTG TAGCGCCTAA AACATTAATC TATGTCATAG GCGCACGTTT   180

CGTTTTATAC TTATGTTGCA TCATTTAAAT GATTTTCGTC AATTTCTTTG ATGCTATCTA   240

CATCTAACAC GAGGTTAACT TGCGTTGATT TTGATAAAGT GATCATAGCT TTTAGTACTT   300

GAGGATTTTT ATTGTTGCTG TTACGAATGT GGTCATGTTT AATGCGGGAC AGTAATTTAA   360

GTTGTTTTTT TACAATTGAG AGTGTGATAT TTCGATTCGG   400

(2) INFORMATION FOR SEQ ID NO: 3079:

      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 319 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3079:

```
AAACGTTTAA TATACACTTT TACACGTCGC CTTCATTGAA GCGAATTGCC ATAACCTTCA      60

CATTATATAT AGTTCTTTCC ATATAAATGT CCAAATTTTT AGAACAACGC AATArATAAC     120

CATCCACCTA ACTTATCAAA AATTTAAGTG GATGGTTTTT CATTTTCATT TATATTTATA     180

TTAGTGTTAA TCCAATCATA GATTTATCTA TATGCACTGC TCTATACaTT TCCTCaTTTA     240

ATTTGCyTTA CTTTCATTTA TATCATTATC AGAACACTTG GCGTGTCATC GnTATTATTT     300

CGCATCTTTG AnACGTTTA                                                  319
```

(2) INFORMATION FOR SEQ ID NO: 3080:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 285 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3080:

```
TCAAATGCAT CTAGGnCACA TTATTCTATT TGGGCATTCT TAGTGCTGTT CTTATTTGCG      60

GCTTTAACGT CATCTATTTC TTTATTAGAA TTAAATGTTT CTAACTTCAC GAAGAATGAC     120

AATACAAAAC GTAAAAAAGT CGCAGTGATC GGTAGTATTT TAGTATTTAT CATTAGTATT     180

CCAGCAACCT TATCnTTTGG TATCCTAAAA GATGTAAGAT CGGTGCGGGA ACGATTTTTG     240

ATAATAAGGA TTCCACCGTT CGAATGTAAT GAAGCCATAA GCGGG                     285
```

(2) INFORMATION FOR SEQ ID NO: 3081:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3081:

```
ATCATAGCGT TTCTCCTAAA AATTACGATT AATCAAAGTA TGCCATTATT TAACTTTAGT      60

TTCTTCAGAA TTATTTGCCC CATTATCATG TTTTTCTTCT TTATTAACAG CATTTTTATC     120

ATTTTTAACA AGATACAATT TACCAATTAA TGGGCGGTGT GCGTGCTGGT ATGGGTTATA     180

CTGGTTCACA CGATTTAAGA GAATTACGCG AAGAAGCACA ATTTACACGT ATGGGTCCTG     240
```

CATTCTAATT AAGATAAAGG AGAACGACAA ATATGGGAAA TGGCAAAGGA CCAAGAGTTA   360

ATCCTTGTCT TAGGACTTTG GTAGGCCATT ACACCCATTA   400

(2) INFORMATION FOR SEQ ID NO: 3082:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 248 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3082:

TGAATTTGCT CCAAATAAAA ATACAATTGC CATTAAAATC ACCAGATATT ACAAGTGGCA   60

ACATGTTAGA AACACCGTTC ATTAAGTGTT TATAGAATGC TTTACCTGGG CTTATTTCTT   120

GACTGTCATT TGAGTTACCT GGCAACAAAA GGTTTACGAC TTGTATCTAA TGAATACCAT   180

CTGCTACTGG TnCTTCTACG ACATTTTTAC CATCGAnGCG GTCCGTCTCA ACATGTACAT   240

CAGCAGCA   248

(2) INFORMATION FOR SEQ ID NO: 3083:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 368 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3083:

TACTAAAGGT TTAAATCAAA AATGGCTAGG TATCGTATTT GCGATTTTAA TTACAATTAC   60

ATTTGCATTT GTATTTAACA CAGTGCAATC TAATACAATT GCGGAGTCGT TAAATACGCA   120

ATATAATATT AGTCCAGTAA TCACAGGTAT TATTTTAGCA ATCGTAACAG CTATTATTAT   180

ATTTGGTGGT GTACGTAGTA TTGCTACGTA TCCTCGTTAA TGTACCGATA TGGCTATCAT   240

TACATGGTAT GGTTTAGTAA TAATGCTATT AATTTAGACC AATTGTCCnA TGATAGGACG   300

ATATAAAAGG CATTGGnACG ACAAGnACTG GTGCGCTGAG GGCTCGGTCT CCAGGACAAC   360

GGGGTATC   368

(2) INFORMATION FOR SEQ ID NO: 3084:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 256 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3084:

TTGGACTTTA TAAAGTTACT AAGTTGTAGA TTATCCTGGT AAAGAAGATA TTGCGGTTGT   60

ACAAGTTGAA GAAAAATCAA CACAACCAAA AGGTAGAAAA TTCAAAGATT TCACTAGTAA   120

ATTTAATATA GCATCAGAAG CTAAAGAAAA TGAACCTATA TCAGTCATTG GTTATCCAAA   180

TCCTAATGGA ATAACTACAA ATGTATGAAT CAACTGGTAA AGTATTATCA GTGAATGGGA   240

TATAGTGnAT CGGATn   256

(2) INFORMATION FOR SEQ ID NO: 3085:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 311 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3085:

ATATGCATAT GCTTCTTTAG GTGAACGAAT ATCTGGTTCA GATACGATTT CAATTAGCGG   60

TGTACCTTGA CGGTTCAAGT CAACTAATGA ATACTCCACC TTTATGTGTT GACTTACCAG   120

CATCTTCTTC CATGTGAAGA CGAGTAATAC CGATTCGnTT TGTTTCACCG TCGACTTCGA   180

TATCGATATA TCCCATTTCA CCAATTGGGT TGATCAATTG AGAATTTGAT AGCTTTGGGA   240

TATCGGGATA GAATAGTCTA CGGTCAACTA GATCnGGTGC GAnTCCATAT TTAGTGCCAT   300

GCAGCACGCA T   311

(2) INFORMATION FOR SEQ ID NO: 3086:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 271 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3086:

ATGTAAATGA TCATCCTTCA TAATAACAAC GATTACTGAT CTTGATCATG ATTTTGAACA   60

ATAACAACTG CTTTATTAAT ACCTTGTATA CGCTCGAGnC ATGCCAACCT CTGACAACTC   120

AATCCTAAAC CCTCGAATCT TAACTTGTTT GTCCTTTCGA TATAAATAAT CTATGTTGCC   180

ATCGGGTAAC AAACGAACGA TATCACCACT TCCTATACAT CAGCTGATTT ATATTTGAAT   240

(2) INFORMATION FOR SEQ ID NO: 3087:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 256 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3087:

```
GTAAAGATTT CAATTCATCA TCTTTAAATA AACTTAATGG TAATTnGTTA TACCnAATAA      60

AGCCTTCTGG ACACTTCCTT TAGACCGACG ACCGTCTTAG CTAATGTCGA TTTCCCTGAC     120

CCTGATTCAC CGACAATGCC TAATGTTTCG CCTTTTCTAA TAGCCAAGTT AATATCATAA     180

CTGCTCGGTA TGGGCTGCCC CTCGGTGATG TGTAATCCAC GCTCCACGCG ATCGATTTTA     240

ATAAAATATC ATGGTT                                                    256
```

(2) INFORMATION FOR SEQ ID NO: 3088:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 337 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3088:

```
AAGGTTATTT GAATGATCAA GGTATCCACA AAAGAGGTGC TGAAATAGAT CGACTCGTTA      60

AAGGATGTAC AGGTGTTAAA CGTACAACTG GACAGCATCC AGGGGGTATT ATTGTAGTAC     120

CTGATTACAT GGATATTTAT GATTTACGC CGATACAATA TCCTGCCGAT GATCAAAATT      180

CAGCATGGAT GACGACACAT TTGATTTCCC TTCCTnTCAT GATATGTATT AAAACCTGAT     240

AAACnTGGAC ACGTGATCCC ACCATGATCG ATGCCTCCAG ATTATCAGGA ATGATCCAAA     300

ACCATACCTG AGATGTAAGA GTATCAGTAT TAGACnC                             337
```

(2) INFORMATION FOR SEQ ID NO: 3089:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 303 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3089:

AAACATTACT TTACGCTATC AATGGTGGTA AAGATGAAAA TCTGGTGCAC AAGTTGGTCC   120

AAACTTCGAA GGTATTAACA GCGAAGTATT AGAATATGCC GAnATTCAAG AATTTGATCA   180

AATGATGGAT TGGCCTAGCA GGTGTTTACA TTAACTCATT AAATGTATnA CTACATGCAC   240

GATAATACAG CTATGACGAT TGAATGGATT ACATGTACAG AATTGTCCGn CCATGGCACA   300

GGA   303

(2) INFORMATION FOR SEQ ID NO: 3090:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3090:

CTTTCGTTAA AGGGGCATAT TCATATAATG GATGGTCATT AATAATAATT CCTGCCGCAT   60

GTGTAGATGT ATGTCTTGGT AAACCTTCTA ACTTTTTACA AATACTGAAC CAGCGTTCAT   120

GTCGATGGTT TCGATGTACA AACTCTTTAA AATCGTCAAT TTGATATGCT TCATCAAGTG   180

TAATTCCTAA TkTATGTGGG ATTAAACTTG GAAATTTCAT TtAATGTAAC TTCATCAAAC   240

CCCATAATTC TTCCAACATC TCTAGCAACT GCTCTTGCAA GCAGATGACC GAAAGTCACA   300

ATTCCAGATA CATGTAGCTC GCCATATTTT TCTTGGACGT ACTGAATGGA CCCTTTCTCG   360

GnGTGTATCT GCAAGGTCAA TTTTCATTnT CAGGCATGGT   400

(2) INFORMATION FOR SEQ ID NO: 3091:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 340 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3091:

TTGTTTTTTC ACGTTCAATn ATTATCTTCA ACTTGTGACT ACAGATTTTA AAATGGAATT   60

TACAAGTATC TTCTTCAATA TTTTGCATCA TGATATCAAA TAATTCATGA CCTTCATTTT   120

GATAGTCACG TAATGGATTT TGTTGTGCAT AAGAACGTAA GTGAATACCT TGACGTAATT   180

GGATCCATGT GTCGATATGG ATCAGTCCAA TGGCTATCAA TAGAACGAGG TAAAATCATA   240

CGCTCAAACC CCATCCATTG GnTCCTCTAA GATACCTTTT GACCTTGGAT AGCnGCTCAA   300

(2) INFORMATION FOR SEQ ID NO: 3092:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 400 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3092:

```
CGACACCTCA ATAATCATAT CGTAATGTTC AACTTTTCCT GATTTAAATG TAATTTCATT      60

TCCATTGATA GCATTAATTT CCTCATTTAA ACGGTATGGA ATCTCCCGCT TATCTAATTC     120

ATCAAGTATA GGTTGATTCA GTCGGCATCC ATAATTTATT TATCTTATCA GATCGATGAA     180

TAAAGTAGGG TGTAAACCAC GTTCCATAAA GATTTCAAGG AACTCCAATG GAACATAACC     240

TGCACCTACC ACCAATACTT TATCCACTTG GATTGGCTTG GAGGAATGGT CGGATAGGCA     300

TCCAGGGCCT CCAAAATTCC nAGGGGAAAn GGTAATATCC ACCTTCCAAG GCCAAGGGCC     360

AATTGGCACC TGGCCACCCA GGGnCTTAAA AAGGGGTTAA                           400
```

(2) INFORMATION FOR SEQ ID NO: 3093:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 252 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3093:

```
TTATACCCGn CAAATTCATA AATATAGTnC CTTTTCAATA GATTGATATG TATGTCTAAA      60

TGTATCGATT AACTTTGCTA ATGCTGCTTC ATCTAATGGT CGGTCTGCTA ATTTTAAAAA     120

TGTATTCTTC AATAGGTATT CCCATATAAT GCGTTATTTC TTTAGATGAT GGTTCCGTTA     180

AGCCACATGC TTTAAATGCA CTTTGTGTTG CTACTTCACC ACATTTTTTC GTGTCTGCCA     240

ACGTACCATC AA                                                        252
```

(2) INFORMATION FOR SEQ ID NO: 3094:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 314 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

AATCTATTAA TAATGAAGAA AAAATTGTAC TAGCACGTAG ACGGTTAATA AAGTTCGATA   60

AAGATATCAG TATTCCATAT ATTCTAAAGC AAGCATATTC TAAAGAAAAA AACAGTTATA   120

TATTCTTGTT AGAATCACAA GATTCTATAT TCTTTTCACA AACACCTGnn CAATTAATAA   180

AGGTCAATAA TAAAATCTAT CGACTAAAGC TGTGCAGGTC AATTAAACGG TCACAAGTGA   240

GGCCGAGGTA CAAAAAATGT TGAGCATTTT AAAGTATAAA CTTATCGACA CGnTTGTGTG   300

CAGTTTTCAT GTTT   314

(2) INFORMATION FOR SEQ ID NO: 3095:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 332 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3095:

GGTGAGGCGG CATTGAGAAA AAATGCTGAA GTAATCGAAG CTGTATCGCA GTCTTGTTTG   60

ACAACAGGAT TTTGTTTATG GTGCCAATTA GCTTTTTCAA CGTATTTAGA AAATGCCACG   120

CAGCCACATT TAAATAATGA CTTACAACAG CAATTGTTAT CTGGAGAAAT ATTAGGTGCT   180

ACCGGATTGT CTAATCCCGA TGAAGTCATT TAATGGATTT AGAAnAAGTT GGACCCTTTG   240

AAACACCACC TTAATGTTGG ATGGGACCAA TTGGGTGGTC CAGTGGGAnC GTAATGCCCA   300

GCTGTAAAGT nATAATCCAA GGAAAGACCC AT   332

(2) INFORMATION FOR SEQ ID NO: 3096:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 400 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3096:

TTTATGCATA CGCGCACTCA TCACACTACC GACAACAACA TCATCTTTTC GAGCATATCT   60

ACTTAACAAC GTCATGACCA CACTCATAAA GAACATAAAA TCAGTAATTT GATGCTTTTC   120

TACATACTTT TGAAGTAGCT GTCTCATTTG TTGATTCATG TAAATGACAT CATGCTCCAT   180

TTGTCGGTTT AATAATTGGT CTAACATAnT CTGTCGGGTA AGCCTAAAAT AGGGTACTTC   240

ATCCTTGAAT TGAGGATACC CATATTGGTC CTAAGGTTCG GTCCATATCC ACGGATGGCG   300

ATTTAAGGTT GGATAAAGGT GCCGTTAAGG ATCCAATTCC   400

(2) INFORMATION FOR SEQ ID NO: 3097:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 265 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3097:

ACTCTGGTCC TTCTGCATAA CTGCCGTAAA TAATTCACCT TCATCACACG CTGTACCTAC   60

CAATAATCCC nCACGATATA CGTGGAATTC GAGGTGTACG GTAGAAATAC TTCACCAATG   120

ATGCACTTAC AATTTTAAAT AGATTTTTAA GACCTTGTTG GTTTTGTACA ATTAATGTGA   180

CATGACTAGG TCTTGCACGT TTATATGCAT CTTCATTACT GAGTTTTTTG GTTGATTTnC   240

GTTATGATTT AATACGGCTA ATTCT   265

(2) INFORMATION FOR SEQ ID NO: 3098:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 321 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3098:

CTAATGTATC AGTTTGGCAT GAATTCTTTT GCATCTTTCA ATAATTGTTG TGATCTTTTT   60

TAGTCACATC ATCAATTTTC TTATCTTCGT ATAATGCTTT TTCAATCTTA TGATATCCTG   120

ACCATTCTTT TTCCTTTTTC TCTTCTTTCA TATCTGCAAG CGGGCATCCA ATTTTAGGAT   180

CCTAAATCTC CCAAATGCTT CTGAACTGGT CAGAGCGTCA TAATACATAC GACTTTTGGA   240

TATACGCTTT TnCTTGGGCA TACATTATTT CAATCGTTTA CAAATTTTTC TGACCTTTTA   300

AAATCATTnA CTGTCAnCAG A   321

(2) INFORMATION FOR SEQ ID NO: 3099:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 276 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

ATCCGCAATC TGAGAAACAT CATCTTCGAG TTGTTGGAGG GTTCCAATTT TCAAGTCATA   60

AATCAGATGA TGAATGGCGA GAGTTTGGAC TAAATCATTT TGTATTACCT GAAGTTTTAA   120

TTTCAACTGA TAATAATGGG ACATTTTTAA CTTATACAGT TAAAAGGGAA AGTTTTACTG   180

TTGAGGCATT GAACGATTTA ATGGATTGTT CAACAATATA TCGGACATAG AGTGGACGAC   240

CAATGGGGGA ATACCAGAAT GAGATATTAT AAAACA   276

(2) INFORMATION FOR SEQ ID NO: 3100:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 237 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3100:

GTCATTTGAT GACAATGGTA TTAGACCAAG TACCAACCGT TCTGTGCCAC nTAAAACGTT   60

GTTAATAACT TGCCGGGCTT CACACTAATC AATGGTGGCA AAGTAGGGGT GTTTAGTCAT   120

GCAAnGTTAA GAACGAGCAT GTTTGATTCA GGAGATAATA AGAACTATCA AGCACAAGGA   180

AATGTAATTG CATTAGGTCG TATACATGGA ACTGATACGA ATGACCATGG CGATTTT   237

(2) INFORMATION FOR SEQ ID NO: 3101:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 254 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3101:

nCGATATAAC AAGGTTGTTA GACTTAAAGG TGGCGATCCA GCGATATTTG GTCGTGTGCA   60

AGAAGAAGTC GACATACTAA ATGAACATCA TATTGCGTTT GAAATTGTAC CAGGGGTGAC   120

ATCAGCGAGC GCnAGTTTGG CTACTATGCA GACAGGTTTG ACAATGCGTA CAGTTGCTAA   180

AAGTGTGGAC ATTTTCTACA GGTCACTTTT AAAGATTCAG AAGAAAATGA AGTGGGATGG   240

TCCATTCCTT AAGT   254

(2) INFORMATION FOR SEQ ID NO: 3102:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 240 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3102:

```
CAATCACTCA TGTAGTAATT GATACCTAAG AAGTCGTTTA AATCTTTGGC TGCATCTAAA      60

ATGGCATAAT CTTCATnTGT AATGTTTAAT TTACCGCCAn TAACAGATAA GATATGTTGC     120

ACACCTTCCA TCGTTTCACG AGTAATACTT ACCTAAATAT GTTGCATCTA AGATGAATTT     180

ATTATGGATG GATATCTTCT AAATTCTGCT GCACGGGACA TCTTCAGGAT TTGGATGGTT     240
```

(2) INFORMATION FOR SEQ ID NO: 3103:

  (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 328 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3103:

```
GTTGTAAACT TCAATTGTTC AAATAAATAA CACATATCAT TGGAGGTGAA TTGATATGCC      60

AGATTCAATC ACAATTATAG ATGAAAACAA AGTGGTTGAT GTTGTATTAA TTGCAGGTAG     120

AATTTTACTT GAATCAGGTG CTGAnACATA TCGAGTTGAA GATACAATGA ACCGTATCGC     180

ACATAGTTAT GGTCTTCATA ATACATATAG TTTTGTCAGT TCAACTGCAA TTATTTTTTC     240

ATTAAACGAT CGAACAAGTA CAAGATTAAT TCGTTACAAG AGCGTACAAC AGATTTAGGG     300

AAnGTGCGAA TAAGCGGGGn AATTCTTC                                        328
```

(2) INFORMATION FOR SEQ ID NO: 3104:

  (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 265 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3104:

```
TTTTGCTTTG TGCGCTAATA ATCTAATGTT CGTGGAACCG nAACCAGAGA TATTACAAAT      60

ACATCATCGA CTAATCGCAG GTGTCGTTGA TTCTCCAACA ACATGTGCCT GTTTGCCGAG     120

CTGATTTAAG GCGGCATTGC AAAACTATTC GCCACGAATC CTGAACGTCC TTTGCCAGCT     180

ACAAATATAT GTTCAGCATG TAGTATTTTG GATGCAAAGT TGAAAACTCA TCCGCTTCAA     240

CATGTGACAA AGTCACTTTA ATCnA                                           265
```

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 243 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3105:

ACTAGTAGAG TATCTAATGG TGATTTAATC ATTATTACTG CTGGTGTACC AACTGGTGAA   60

ACTGGAACTA CTAATATGAT GAAAATCCAC CTAnTTGGTG ACGAAATTGC TAATGGTCAA   120

nGTATTGGAC GTGGATCAGT TGTTGGTACT ACATTATTGC TGAAACTGTT AAAGATTTAG   180

AAGGTAAAGA TTTATCTGAC AAATTGATCG TTACTAACTC AATCGATGAA ACGTTTGTGA   240

CCT   243

    (2) INFORMATION FOR SEQ ID NO: 3106:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 234 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3106:

CTATTGCGTT TGGGTAAATC TAAAGCAGGC GTAnATTATC AAAGTTTGGG ATATGCAACC   60

AGCACACTTA TTCTTTATGA TTGCAGCGCC AGAAGTGGnG CCCAAACACA TCTAGATGCT   120

TTACTAAGTT GTCTGGTATT TTAATGGATG AAAATGTACG TGAGAAATTA TTACATGCTT   180

CATCACCTGG AAGAAGTACT AGCGATCATA GATGAGGCTG GATGATGAAG TGGA   234

    (2) INFORMATION FOR SEQ ID NO: 3107:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 227 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3107:

TTTTGAAGCG GCATAATCAT GAAGAATAGG ACTAGGATTA TAACCTTGTA CAGATGATGT   60

CGTTGTAATT GACGCACCCG GTTTTAAATA TTCCAATGAC TTTTTGAACT GTCCAAAATA   120

GCGGnTAGAn ATTCGTTTCA AATGTTTCTG TAAATGCCTC AGTTGTAAAT CCATGAATAT   180

(2) INFORMATION FOR SEQ ID NO: 3108:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 257 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3108:

CTTTAAGTTA CGTTCGGCTT TGATTAAAGT AAAACGTGGT ACTGTTTCCT ATGACAAGAG   60

TCTAATTGGA TACAATGTAA ACAAAATGGT GnATTTGTAT TATAGATAAT AAACATTCGn   120

TATACATTCA ACATATCGAT GACCACTTGG ATTAAGCAAC GTAATATCAT TCGTACTGCT   180

CAAGAAATGA CAAACGAAAT ACGAGAAAAT TTTGAGTCAT ACACGTCATT TAGAATGAAT   240

AGTATTATGC AAGTACT   257

(2) INFORMATION FOR SEQ ID NO: 3109:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 227 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3109:

CTTAAAGCCA AGTCGATCTG CTAATTTTGC AAGTGTCACT GAATCTTGCA ATGCCTTTTG   60

TGCATCCTTA CCTTCATCTA TTAAGGCATA GTCTAATACG CTTAATTTAA CCAATCCGTC   120

ATCTCCAAAC TTATCCTGTC ATGTCAAACC GACATAACAT TTGTAGCGTT CTTAATACCA   180

TTCCCTCTGC ATATACCCAC GTATATGATA ACGTnTTTCA nTTAACT   227

(2) INFORMATION FOR SEQ ID NO: 3110:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 326 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3110:

TTTCTTCATC GTTTGTGAGA AAGAGGTATT TTTAATTGGG AAAnCAGGTA AAAAGGATGG   60

AAGTACATAA AAAGAGCAAT GCTTGGGCAT TATTCCnCTT GTTATTATTT GTGGCGTTGT   120

2446

GATAACGTAA TTGTGCGTTA TTAATGAATC GAAAAGAATC ATTGCTAAAA AGTGAGTCTC   240

CGAAAGGCGG CCTTCAACTG TTAAGAGTGA TTTATTGCAG GCTTCAATCG CGAAATGGTG   300

CnAAGCGCGT ATTAGCACTA GCCGAA   326

(2) INFORMATION FOR SEQ ID NO: 3111:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 300 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3111:

CTACGGCGCC TTGCATCTTT CCCAACAATT AACCCCAACT CTATTAGCAC AGATTTATCA   60

ATTGATTCAT AAGCTTCATC AAAGGGTGAA CTAACATGCA TTAACGCTTC TTTAATATCA   120

ATTAAGTCGG CATGTTCAAC ACCAATTTTC CCTTTTTTAT TTTTAGCTTT TTCTCTATCA   180

ATATACGCAT GTTTAACACC TTTGACATGT TCAGTAAATT GTGACTTCCT nAATTTTTTA   240

TCCTCCCTTG GTGnnGGGGG GGGGGGGGGG GGGGGGGGGG GGGGGGGGGG GGGGGGGGGG   300

(2) INFORMATION FOR SEQ ID NO: 3112:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 358 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3112:

TTATTGTTAA CACAAGGnTT CGAACAAGGT TGGTTTAGTA CATTTTCAAT CATTTGTCTG   60

AGCATTTTTA TCATCACTAC GTTGATATTC ATCATCATCG AACGTCGACA TGAAGTACCT   120

TTTATTGATT TCTCAGTATT ACGCAACCGT CCGTTCATTG GTGCATTTTT AAATAACTTT   180

GTTTTAAATA GCGGTCTAGC GTAACAGGGT CTTTCATATA TGCTCAACAC ACCTGGTTTA   240

TCGCGCGCAA TCGGACTGTT ACATGCCAAT GCCATGGGCG TTCGAGATCG TTAGTGAAAG   300

CACATAGTTC GGGCAATGAG CCACATGGTC GTGTCCGTCA CGCACACATA TAGCAGCT   358

(2) INFORMATION FOR SEQ ID NO: 3113:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 251 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3113:

```
TCGGTCTTGA AAACCGACAG GGGACTTAAC GGCTCGCGGG GGTTCGAATC CCTCTTCCTC        60

CGCCATCAAT ATTTATATTA AATTCTATAT ATAATGAAGG TAAGTGCTCA AATTTTGAGT       120

ATTTACCTTT TTTATTTGTC TTTGAATGGC TCGTAATTTT TGATAATAGA AATGATAAGG       180

CATTGAGATT GGAAGGGCAT TTGGCTTGTG CAAnATACAT AGCnAAATGT CGTTGTTGTT       240

TTGTGATAGA T                                                            251
```

(2) INFORMATION FOR SEQ ID NO: 3114:

     (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 6591 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3114:

```
TTTAAGTGAA TTnCTTTGGG TTACAGAAwT TTCAACAACT TTAAAGCACG TATAATGATG        60

ATTTTCAGCT TGTACAAAGG AGAAAAAAAG AAGACAACCA AGCCCAATAA TGGACTGGCC       120

GCCTAATAAT AAAAACTCTA AAAGTTGTAT TTTAAAAATA GTTCTTTAAA TTATATACCC       180

ACCACATTTG GTGGAGaACC GTTAAACAAT GCATAGTTGC TTAACTTCCA ATATTGAACT       240

CATCATTACA ATTTGACATA GAGTCTATTA AAGCGTGTGC CATTTGAGTC CACTTTTATT       300

TGTATTGTAT AGAGAGAAAT AAAAAGAAAC CTTGTTTTAC AAGGTTTCTA ATACGTTATG       360

TTATGTAAAT AACAGTTAAT TATACCGGTG GTCGGGGTCG AACCGACACT CCACAAGTGG       420

AACGgGATTT TGAGTCCCGC GCGTCTGCCA ATTCCGCCAC ACCGGCTTAA TGGTAAACAA       480

AAAACTTCCC TTTGGAAGCA ATTATGGAGC GGAAGATAGG ATTTACACCT ATACCTCGTT       540

CCGGGAAGGA ACGTGtTCTA AAAGTTGAAC TACTCCCGCA AATATTAAAT TATGGAGCGG       600

AAGATAGGAT TTACACCTAT ACCTCATTCC AGGAAGGAAT GTATTCTAAG AGTTGAAATA       660

CTCCCGCATT ATTATTAAAT TATGGAGCGG AAGATAGGAT TTGCACCTAT ACCTCGTTCC       720

GGGAAGGAAC GTGTTCTAAA AGTTGAACTA CTCCCGCATA AACCTGGAGG CGGCAACCGG       780

ATTTGAACCG GTGATAAAGG TTTTGCAGAC CTCTGCCTTA CCACTTGGCT ATGCCGCCAA       840

TAACTGGGCT AGCTGGATTC GAACCAACGA GTGACGGAGT CAAAGTCCGT TGCCTTACCG       900

CTTGGCTATA GCCCATTAAT AATAAGGGCG GCTGAAGGGG ATCGAACCCT CGAATGTCGG       960
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CGAACCCACA CCAAAGGTTT TGGAGACCTC TATTCTACCG TTGAACTATG CCCCTATTAA          1080

AAATAATAAA TGGAGGGGGG CAGATTCGAA CTGCCGAACC CGAAgGAGCG GATTTACAGT          1140

CCGCCGCGTT TAGCCACTTC GCTACCCCTC CATAAATGGT GCCGGCCAGA GGACTTGAAC          1200

CCCCAACCTA CTGATTACAA GTCAGTTGCT CTACCAATTG AGCTAGGCCG GCTAAGAAAT          1260

GGTTCAGGAC AGAGTCGAAC TGCCGACACA TGGAGCTTCA ATCCATTGCT CTACCAACTG          1320

AGCTACTGAA CCATAATAAA AATGTAATGA TGGCGGTCTC GACGGGAATC GAACCCGCGA          1380

TCTCCTGCGT GACAGGCAGG CGTGTTAACC GCTACACTAC GAGACCTATA AAATATTGCG          1440

GGAGGCGGAT TTGAACCACC GACCTTCGGG TTATGAGCCC GACGAGCTAC CGAACTGCTC          1500

CATCCCGCGA TAATAAAAAA TAATGGCGGA GGAAGAGGGA TTCGAACCCC CGCGGCCCGT          1560

TAAGGCCCTG TCGGTTTTCA AGACCGATCC CTTCAGCCGG ACTTGGGTAT TCCTCCATTA          1620

TTATAGGTAA ATCGCTATTA ATTATAAAAT TAAATGGCGG TCTCGACGGG AATCGAACCC          1680

GCGATCTCCT GCGTGACAGG CAGGCGTGTT AACCGCTACA CTACGAGACC ATTAGTAAAA          1740

CGGAGGAAGA GGGATTCGAA CCCCCGCGAG CCGTTAAGCC CCTGTCGGTT TTCAAGACCG          1800

ATCCCTTCAG CCGGACTTGG GTATTCCTCC AAAATTATAT GGaCtTGCAG GACTCGAACC          1860

TGCGACCGAA CGGTTATGAG CCGTTAGCTC TAACCAACTG AGCTAAAGGT CCTAAATATA          1920

ATTTTACAAC TAATAAATAG TGGCGGTGGA GGGGATCGAA CCCCCGACCT CACGGGTATG          1980

AACCGTACGC TCTAGCCAGC TGAGCTACAC CGCCTTATAT AGTTTGTAAA TAATATGGTG          2040

GAGACTAGCG GGATCGAACC GCTGACCTCC TGCGTGCAAA GCAGGCGCTC TCCCAGCTGA          2100

GCTAAGCCCC CATAATAATT ACAGTATATC GGGAAGACAG GATTCGAACC TGCGACCCCT          2160

TGGTCCCAAA CCAAGTGCTC TACCAAGCTG AGCTACTTCC CGTATAATTA ACGCGCCCGA          2220

TAGGAGTCGA ACCCATAACC TCTTGATCCG TAGTCAAACG CTCTATCCAA TTGAGCTACG          2280

GGCGCATATG TTTTTATTGA AAATGGTGCC GAGGACCGGA ATCGAACCGG TAcGgTGATC          2340

ACTCACCGCA GGATTTTAAG TCCTGTGCGT CTGCCAGTTC CGCCACCCCG GCACTATAAA          2400

AATGGAGCAG AAGACGGGAT TCGAACCCGC GACCCCAACC TTGGCAAGGT TGTATTCTAC          2460

CGCTGAACTA CTTCTGCATA TGCGGGTGAA GGGAGTCGAA CCCCCACgCC GTAAGGCGCT          2520

aGATCCTAAG TCTAGTGCGT CTGCCAATTC CGCCACACCC GCAAATGGTG AGCCATAGAG          2580

GATTCGAACC TCTGACCCTC TGATTAAAAG TCAGATGCTC TACCAACTGA GCTAATGGCT          2640

CTTCCATGGT GCCGGCCAGA GGACTTGAAC CCCCAACCTA CTGATTACAA GTCAGTTGCT          2700

CTACCAATTG AGCTAGGCCG GCAATATGTA AGAATAAATG GTGGAGAATG ACGGGTTCGA          2760
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AAACTGCCTG GCAACGTTCT ACTCTAGCGG AACGTAAGTT CGACTACCAT CGACGCTAAG      2880

GAGCTTAACT TCTGTGTTCG GCATGGGAAC AGGTGTGACC TCCTTGCTAT AGTCACCAGA      2940

CATATGAATG TAATTTATAC ATTCAAAACT AGATAGTAAG TAAAAGtGnA TTTTgctCGC      3000

AAAACATTTA TTTTGATTAA GTCTTCGATC GATTAGTATT CGTCAGCTCC aCATGTCACC      3060

ATGCTTCCAC CTCGAACCTA TTAACCTCAT CATCTTTGAG GGATCTTATA ACCGAAGTTG      3120

GGAAATCTCA TCTTGAGGGG GGCTTCATGC TTnAgGATtT TCAGCACTTA TCCCGTCCAC      3180

ACATAGCTAC CCAGCTTATG CnTTGGCACG ACAAcTGGTA CACCAGAGGT ATGTCCATCC      3240

CGGTCCTCTC GTACTAAGGA CAGCTCCTCT CAAATTTCCT ACGCCCACGA CGGATAGGGA      3300

cCGAACTTcT aCGACGTTCT GAACCCAGnC sTGTACCGCT TTaATGGGCG AACAGCCCAA      3360

CCCTTGGGAC CGACTACAGC CCCAGGATGC GATGAGCCGA CATCGAGGTG CCAAACCTCC      3420

CCGTCGATGT GAACTCTTGG GGGAGATAAG CCTGTTATCC CCGGGGTAGC TTTTATCCGT      3480

TGAGCGATGG CCCTTCCATG CGGAACCACC GGATCACTAA GTCCGTCTTT CGACCCTGCT      3540

CGACTTGTAG GTCTCGCAGT CAAGCTCCCT TATGCCTTTA CACTCTATGA ATGATTTCCA      3600

ACCATTCTGA GGGAACCTTT GAGCGCCTCC GTTACCTTTT AGGAGGCGAC CGCCCCAGTC      3660

AAACTGCCCG CCTGACACTG TCTCCCaCCA CGATAAGTGG TGCGGGTTAG AAAGCCAACA      3720

CAGCTAGGGT AGTATCCCAC CAGCGCCTCC ACGTAAGcTA GCGCTCACGT TTCAAAGGCT      3780

CCTACCTATC CTGTACAAGC TGTGCCGAAT TTCAATATCA GGCTACAGTA AAGCTCCACG      3840

GGGTCTTTCC GTCCTGTCGC GGGTAACCTG CATCTTCACA GGTACTATGA TTTCACCGAG      3900

TCTCTCGTTG AGACAGTGCC CAAATCGTTA CGCCTTTCGT GCGGGTCGGA ACTTACCCGA      3960

CAAGGAATTT CGCTACCTTA GGACCGTTAT AGTTACGGCC GCCGTTTACT GGGGCTTCGA      4020

TTCGTAGCTT CGCAGAAnct ArCcACTCCT CTTAACCTTC CAGCACCGGG CAGGCGTCAg      4080

cCCtATACAT CACCTTACGG TTTAGCAGAG ACCTGTGTTT TTGATAAACA GTCGCTTGGG      4140

CCTATTCACT GCGGCTCTTC TGGGCGTTAA CCCTAAAGAG CACCCCTTCT CCCGAAGTTA      4200

CGGGGTCATT TTGCCGAGTT CCTTAACGAG AGTTCGCTCG CTCACCTTAG AATTCTCATC      4260

TTGACTACCT GTGTCGGTTT GCGGTACGGG CACCTATTTT CTATCTAGAG GCTTTTCTCG      4320

GCAGTGTGAA ATCAACGACT CGAAGACACA ATGTCTTCTC CCCATCACAG CTCAGCCTTA      4380

ACGAGTACCG GATTTGCCTA ATACTCAGCC TTACTGCTTA GACGTGCAAT CCAATCGCAC      4440

GCTTCGCCTA TCCTACTGCG TCCCCCCATC GATTAAAACG ATTATAGGTG GTACAGGAAT      4500

ATCAACCTGT TATCCATCGC CTACGCCTGT CGGCCTCAGC TTAGGACCCG ACTAACCCAG      4560
```

2450

```
TTCGCTACTC ACACCGGCAT TCTCACTTCT AAGCGCTCCA CATGTCCTTA CGATCATGCT      4680

TCAACGCCCT TAGAACGCTC TCCTACCATT GTCCAAAGGA cAATcCACAG CTTCGGTAAT      4740

ATGTTTAGCC CCGGTACATT TTCGGCGCAg TGTCACTCGA CTAGTGAGCT ATTACGCACT      4800

CTTTAAATGA TGGCTGCTTC TAAGCCAACA TCCTAGTTGT CTGGGCAACG CCACATCCTT      4860

TTCCACTTAA CATATATTTT GGGACCTTAG CTGGTGGTCT GGGCTGTTTC CCTTTCGAAC      4920

ACGGACCTTA TCACCCATGT TCTGACTCCC AAGTTAAATT AATTGGCATT CGGAGTTTGT      4980

CTGAATTCGG TAACCCGAGA GGGGCCCCTC GTCCAAACAG TGCTCTACCT CCAATAATCA      5040

TCACTTGAGG CTAGCCCTAA AGCTATTTCG GAGAGAACCA GCTATyTCCA GGTTCGATTG      5100

GAATTTCTCC GCTACCCTCA GTTCATCCGC TCACTTTTCA ACGTAAGTCG GTTCGGTCCT      5160

CCATTCAGTG TTACCTGAAC TTCAACCTGA CCAAGGGTAG ATCACCTGGT TTCGGGTCTA      5220

CGACCAAATA CTAAACGCCC TATTCAGACT CGCTTTCGCT ACGGCTCCAC ATTTACTGCT      5280

TAACCTTGCA TCAAATCGTA ACTCGCCGGT TCATTCTACA AAAGGCACGC CATCACCCAT      5340

TAACGGGCTC TGACTACTTG TAAGCACACG GTTTCAGGTT CTATTTCACT CCCCTTCCGG      5400

GGTGCTTTTC ACCTTTCCCT CACGGTACTG GTTCACTATC GGTCACTAGA GAGTATTTAG      5460

CCTTAGGAGA TGGTCCTCCC AGATTCCGAC GGAATTTCAC GTGCTCCGTC GTACTCAGGA      5520

TCCACTCAAG AGAGACAACA TTTTCGACTA CAGGATTATT ACCTTCTTTG ATTCATCTTT      5580

CCAGATGATT CGTCTAATGT CGTCCTTTGT AACTCCGTAT AGAGTGTCCT ACAACCCCAA      5640

CAAGCAAGCT TGTTGGTTTG GGCTCTTCCC GTTTCGCTCG CCGCTACTAA GGGAATCGAA      5700

TTTTCTTTCT CTTCCTCCGG GTACTAAGAT GTTTCAGTTC TCCGGGTGTG CCTTCTGATA      5760

TGCTATGTAT TCACATATCG ATAACATGAC ATAACTCATG CTGGGTTTCC CCATTCGGAA      5820

ATCTCTGGAT CAAAGCTTAC TTACAGCTCC CCAAAGCATA TCGTCGTTAG TAACGTCCTT      5880

CATCGGCTTC TAGTGCCAAG GCATCCACCG TGCGCCCTTA ATAACTTAAT CTATGTTTCC      5940

ATCCTACAGG AAACGCGTTA TTAATCTTGT gaGTGTTCTT TCGAACACTA GCGATTATTT      6000

CTTATGAATT CAAGCTTATT TAAAACTCTT TATTCACTCG GTTTTGCTTG GTAAAATCTA      6060

TATTTTACTT ACTTATCTAG TTTTCAATGT ACAATTTCTT TTTAGTCAAG CGCTCGCATA      6120

AGCAATATCA CTTTAACCAA AAAATATTTG AATGTTAAAT AAACATTCAA AACTGAATAC      6180

AATATGTCAC ATTATTCCGC ATCTTCTGAA GAAGATGTTC CGAATATATC CTTAGAAAGG      6240

AGGTGATCCA GCCGCACCTT CCGATACGGC TACCTTGTTA CGACTTCACC CCAATCATTT      6300

GTCCCACCTT CGACGGCTAG CTCCTAAAAG GTTACTCCAC CGGCTTCGGG TGTTACAAAC      6360
```

```
ATCTACGATT ACTAGCGATT CCAGCTTCAT GTAGTCGAGT TGCAGACTAC AATCCGAACT          6480

GAGAACAACT TTATGGGaTT TGCTTGaCCT CGCgGGTTCG cTkGCCTTTG TAATGTCCAA          6540

TGTAGCACGT GTGTAGCCAA ATCCATAAGG GGCATTATGA TTTGACGCAT C                   6591
```

(2) INFORMATION FOR SEQ ID NO: 3115:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 325 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3115:

```
GGTGCCAAGC AATAAATATG ACTATGCTCA AACTGAATTA ATGGTGGGTG TGTCGCCATC           60

GTAATTGGAT CGTCTGAAGG CGCATATAAA TGATAGTGCT CTTCGAATAA AGGTAGCATA          120

TGTAATTGTT TGTGTTTACG TATTTCTGGT GTAAGTTCCG TGAAACCAAT GTCTATATTC          180

CCATTAATAC GCTATTATAA TGTGTCAGGT CCAATAAGCC CCGGATGACA TGTGTATCCA          240

TTTGGAAATG GAACCGTTGG GAAAGTGGGA ATAACATGGG GGAACGTCAn TCCCCnCCAA          300

GCCCATnGAG GTACCTTTAA TTTTA                                               325
```

(2) INFORMATION FOR SEQ ID NO: 3116:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 211 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3116:

```
CCGnTTGAGT TCGGTGGCGA CATGATTGAT TTTGTAAGTA AGTATGATGC AACATGGGCT           60

GnTTTACCTA CTAAATTTGA GGCGGGTACT CCATTAATTG CTCAAGCATT GGGCTTGTCA          120

GAAGCTATTC GCTATTTAGA ACGCATAGGT TTTGATGCAA TTCATAAATA TGAACAAGAA          180

TTAACGATAT ATGCTTATGA GCAAATGTCT G                                        211
```

(2) INFORMATION FOR SEQ ID NO: 3117:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 210 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3117:

```
AACGTnTTTT GAAATGATTG CGGCGATGTT GGCGACAGTT AAAGTAGGTG GCATCTTATA    60

TACCTATCGA TATTGATTTT CCGAATAAAC GACAAGGTGC AATTTTGGAG GATGCTAAAG   120

TAACTGCAGT CATGTCTTAC GGCGTTGnAA TTGAAACGAC ATTACCAGTC ATTCAATTGG   180

AAAATGCTAA AGGCTTTGTT GAATCAAAGG                                    210
```

(2) INFORMATION FOR SEQ ID NO: 3118:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 225 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3118:

```
TTAATTGATC CTAGCTTGGT TTGCCTCTGT CACTTTATCA TTGATATTTT GGACAGTTGG    60

GTTGCCATTC AACACTTGAT TAATTTCAGT TAACTTTTGA CGCGCTGCTT GTAATTTTTG   120

GGTGTACGCA TTTAACGAAC GGnCGTCATA CCTGTTGTAT CCGTTGGTTG ATTAATGCTT   180

GTTCTAAATT GCGTTTCCAA GTTTnAAGCG GCGCTTATCT GGTGT                   225
```

(2) INFORMATION FOR SEQ ID NO: 3119:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 222 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

  (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3119:

```
CCAACATGAT GCTAGTTTGA TTAAGTTTCT TCTAAACAGA CTTCAAACGG CATGGTTTAG    60

CATATCCTAT TAAGGTTGAA TCGCGTTAAC AGCACATAGG AAATGCTGTT AGGCGATGCA   120

GAGTGCGATT AGGCAGCTAC TGGAAAATTA TTGTTTGATT TGCCAGTTAT TATAAACTGT   180

GTGTGTTGAT GnCGAnCACA ACCCCTCCGA ACACGCTTAA TG                      222
```

(2) INFORMATION FOR SEQ ID NO: 3120:

  (i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 246 base pairs
   (B) TYPE: nucleic acid
   (C) STRANDEDNESS: double
   (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3120:

```
CGGCGATTAT ATTAAAAAGC CAATTACAGA ATGTAGTGGT AATGAAATAT GCCAAGAATG          60

GCTGTATCAC TTAGGTGTAT CAACTGACAA AATTGAAGAC TTAGCAAAAC ATGCATCTAA         120

tACGATTCCT GTTTATATGC CATATATCAC ATCTTATTTC ATGGACGCGT GCTATCGGCG         180

nACAGACCTT TTAGTCGTGC CCGGCATGCA ATCTnCAGGA ACTTAGGCAT TTATTGGTGA         240

ACTTTG                                                                    246
```

(2) INFORMATION FOR SEQ ID NO: 3121:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 399 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3121:

```
CAAATACCTT CTCAACnTTG TACTTTTTGC CTAATTGAGC TGCACGAATT GCTGCAACGT          60

ATCCACCAGG ACCTGCTCCG ATTACTATAG aTCTGTTTCA ATTGGGAAAT CTCCAACTAC         120

CATGTTTTAC CCCTCCATTA ATAATAATTC TGGATTATTT AATAAACGTT TAATGTGATT         180

CATTGCATTT TGGCCAGTTG CACCATCAAT TTGTCTGTGG TCAAAGCTTA ATGAkrtGCt         240

AATACTGGTG CTGCAACAAT TTCTCCATCT TTAACGATAG GTTTTTGAGC AATACGGCCA         300

ATTCCTAAGA TTGCTACTTC TGGGGTGATT GATAACTGGA GTGAACCATT GTCCACCAGC         360

TGAACCGATA TTACTGATTG TGCATnnGCA CCTTnCATT                                399
```

(2) INFORMATION FOR SEQ ID NO: 3122:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 301 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3122:

```
CAGACAAACC TTGAATTATT CTACCTATAA TTAAAAATGC TGGCAAAGGT GTAATGATGA          60

TGAGTAATGA ACCTACAACA TTTAATATCA ATCCTACATA AGTAATTTTG ACGCGACCAA         120

ATTTATCAGC AACATCACCA GCACCTACGT AAACCAACCA GCCAATAAGG CAGATAAGCT         180

AACAGCGTAT TATCGTTCCC ACGTCACTAC TATATGTGGA TGTATGGGAC ACAGTTTACC         240
```

G   301

(2) INFORMATION FOR SEQ ID NO: 3123:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 378 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3123:

GGAGCAAATT TATCATCTGC AACTAGACAC AACATCACTG TTATTAGTAC CGGGTTATAT   60

AGTAGCAGTC ATTGTTGGTG CACTAAGTGG TAAAATCGGC GAATATCTGA ATTCAAAACC   120

AGCGATTATC ACAGCAATTA TTTAATAGCA CTGAGCTTGA TTTACCTGCA TTGCAGTAGG   180

TAATCACATT CAATCTCGTC ATTCTATGAT ATCTTGCAGT AGCTTGCTTA ATGATGCACT   240

TACTACGAGC ATAAACATGT CTATATGCAG GTGCATGTTA TATTATATAT GGCGACGAGA   300

TCGTnGGCCn ACGTTAACTA ATTCnGCATG TCTAGCCTCG AATTATATAG TAGGAGCGTA   360

GTACGCCAAC TGCCACGA   378

(2) INFORMATION FOR SEQ ID NO: 3124:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 251 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3124:

TATTGCAAGA AATGAACTGC TGATTTTTAT AGTTTTAGTG GTCATAAAAT GCTTGGACCA   60

ACAGGTATTG GCGTATTATT TGGTAAACGT GAGTTACTAC AAAAAAATGGA ACCGATTGAG   120

TTCGGTGGCG ACATGATTGA TTTTGTAAGT AAGTATGATG CAACATGGGn CTGATTTACC   180

TACTAAATTT GCAGGTCGGG TTACTCCCAT TGAATTGGCT CCAAGCCAAT TGGGGCTTGG   240

CnAGGAAGCC T   251

(2) INFORMATION FOR SEQ ID NO: 3125:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 233 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3125:

```
CGGTTAAGTA ATACAGGATG TTCTCTAATT ACTTCTTCCA ATACGTCCCA AACTTCATCA      60
TCCATACGTT CGATTTTACT CTTCGCATTT TTAATGTTAG TTGCAATTTC ACGTTGAACT     120
AATTCTTTCA TTACGAATGG TTTAAATAGT TCAAGTGCCA TTTCTTTTGG TAAACCACAT     180
TGGTACCATT TCCAnGCTTG GACCCnACGG CAATTACCTG AACGGTCCCG GAA            233
```

(2) INFORMATION FOR SEQ ID NO: 3126:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 413 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3126:

```
AATAGATTCC CGGGATTCAA AAGCATGGAT GTTGTACCTT GTTGTnCTCC ATTGGCAATG      60
TACTACCTGA TGTCAAGATG AATTATCCAT CACTTTGTTG ACGTGCTTTA TTTTACAGCA     120
TCAATTTGAT CCAATCGAAA TACCAGATAA CTTAGACTGT GTCCCAGTAA AATAACGATC     180
AATCACATCA TGAGACAAGC CAATCGCTTC AAATATTTGT GCCCCTTGAT AACTTTGCAC     240
TGTCGAAATT CCCATCTTAG CCATTACTTT AATGACACCT TCTGACAATA CATCCGTATA     300
TGTCtTAACA TTATCGACAA CGGTGCCTTG TAACCCTTCT GTCAATGTCA GTTGTTCAAC     360
TGTACGTTGC GCTAGGTATG GCACAATTGa TTCGCGCCAT ATGCGAGTAA ACA           413
```

(2) INFORMATION FOR SEQ ID NO: 3127:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 209 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3127:

```
GTCGTAAATA CTGAACAAAA ATCACGGCAT ACTGTGCAAA TTTnTGAAGA AGCTCAAAAA      60
CTATTACAAG CACATCATGC GATTGTAGAA GGATATATCG AATCAGCTTT AGAGCGTGCG     120
TAnATCATCT TCTACATACA TAGGTAATTT TATGGCGATT CCTCATGGAG CATCCTGTAA     180
AAAGTTTTAC AATCACATGT GCTTATTTT                                      209
```

(2) INFORMATION FOR SEQ ID NO: 3128:

(A) LENGTH: 204 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3128:

10

TAAATTAATG GAGTTTGGTA CACGTCGTCG CAAGAAATTG ATGCAGTGGG GCGCTAGAGC   60

TGCTTACATC GGGGGCTTTG ATTCTACAAG TAATGTTAGG GCGGGGAAAT TATTTGGTAT   120

ACCTGTGTCT GGTACACATG CACATGCATT TGTCCAAACT TATGGAGACC AATATGTTTG   180

15

CCTTCnAAAA ATATGCTGAA AGnC   204

(2) INFORMATION FOR SEQ ID NO: 3129:

        (i) SEQUENCE CHARACTERISTICS:

20
                (A) LENGTH: 239 base pairs
                (B) TYPE: nucleic acid
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3129:

GAAATACCAT TAATATAATA GTCGGTAAAT TAAGAAACGT GGTGCGCGAT TCACAACAGA   60

30

AATCTTAACT TATCGAAGTA TCCTGTTTTC TCTGCAACAC CAATACCAAT CATCACTGCT   120

AGTACTAAGC CTAATGCGGG AACTCTGAGA AATTTTTAAT CGTATTCTTC TTATCATCGT   180

AAATCCATCT GGCTATTATA TTTTAATATA AnGGTTTGAG CTACCGGATG CTAACGnAC   239

35

(2) INFORMATION FOR SEQ ID NO: 3130:

        (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 259 base pairs
                (B) TYPE: nucleic acid
40
                (C) STRANDEDNESS: double
                (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3130:

ATCACAATAA ACATTTTAAA ATTCTTGTTA TCATAATCAT TAAAAGGTAT TAACCTTAAT   60

AATATATTCT CTnGTCTCAA CCTTAATCGT ATACTTCAGA CGTCTGTTTG TAGACAATAA   120

50

AGTCATTCAC GTCTTCATAT GTCATCAnAT GTTTATCATG ATATGATGAT ATATAATCGG   180

TATATACTGT AGATATTACA CATAAGAGAG GATATAATAT GAAAAGGTCA TTAAGATGTG   240

CTGAGAGCTG TGTATCAGT   259

55

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 227 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3131:

TGTGCCTGCC ATTTTGCAAT ATCTTCATCT TCACGTGGTA ATGCACAAAA ATGTTTACCA   60

TGTGCATTCA CAACTTCAAA AATATGTTGA CATGTGATGT TACTTGATCA TCACGCGTTG   120

CCATGGTATG CAAGTGCTGC GATAAATCTG CGGCACCTTC GACTATCATG CTAACCTTCG   180

CTTGTnnATA TCGCAATGGC ATACCCCTTC AACATCTTCT ATCATGG   227

(2) INFORMATION FOR SEQ ID NO: 3132:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 203 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3132:

ATCGCAGTGA TGTnATCATC TGCTGCTGTA GCnTAGCAGG TTCAATTTCA TTTATCGGAT   60

TAATGGGTCC GCATATTGCC AAACGTATCG TTGGACCACG TCACCAGTTG TATTAACCAA   120

TTGCCATTTT AGTAGGGGCA TGTATACTTG TAATAGCTGA TACAATTGGC CAAAATTGTA   180

TTACAACCAG GTGGGGTTCC AGC   203

(2) INFORMATION FOR SEQ ID NO: 3133:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 201 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3133:

AGCATTTAGT TTAGCGGCAG TAGCTGCAGA TGCACCGGTA GCTGGCACAG ATATTACGAA   60

TCAnTTGACG AATGTCACAG TTGGTATTGA CTCTGGTACG ACTGTGTATC CGGACCAAGC   120

AGGTTATGTC AAACTGAATT ATGGTTTTCn AGTGCTAATT CTGCTGTTAA GGTGACACAT   180

TCAAAATACT GTACCTAAGG A   201

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 207 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3134:

```
CATTTGTAAC TGTTATTGTT TATAACTTCT GTGTGAAGCG CAATATTACA ATTAAAATGC      60

CGAAAGAGGT ACCGnCGAAT ATTTCACAAG TATTTAGGAC TTAATTCCAT TTTCAGCGGT     120

AATCATCATT CTTTATGCAT TAGGATTTnG TCAATCGCAA CCAGCTTTAA ATCAAAATGT     180

AGCGGAGGTA TTTTAAAATT ATTCGGT                                        207
```

(2) INFORMATION FOR SEQ ID NO: 3135:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 203 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3135:

```
AACACCTTTA GGTCGTGCAG GTCAACCTGT TGAGTTATGT GGTACTTATG TGCTATTAGC      60

GTCAGAAGGA ATCAAGTTAT ACAACCGGAC AAGTnTTCGG TGTTAGCGGT GGAGTGCAAn     120

TAGGTTAGGT TTGTATGAGC TTTTAATTGA GCACCATAAT GTTAATTTAG TTACTTCAAT     180

CCATTAAATT AAATGAATTG GTG                                            203
```

(2) INFORMATION FOR SEQ ID NO: 3136:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 211 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3136:

```
CACATCCAAT GCAnTCTACT AAATCAGACA CACCACAATC TCCAACCATA AnACAAGCAC      60

AAACAGATAT GACTCCTAAA TATGAGGTTT AAGAGCGTAT TATACAAAAC CGAGTTTTGA     120

ATTTGAAAGC AGTTTGGATT TATGCTCAAA CCATGGACGA CGGTTAGGTT TATGATGTTA     180

TTCCAATAGG TTCACTATAA ATAGCTTAGT T                                   211
```

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 260 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3137:

ATTGGGAAAT GTTCCCCCAC CACCTACAAT TTGTGAATAC AAACAATACG TATTGCAATG   60

GACTTTACCT GGGCTTACCA AGTGAATGTA TACGTCACGT ATGATACGAT TGTAGTTGnA   120

AAATAATGCG AACAGAAAAT CGTTATAAGT ACAAATAATA CAGGTGACTC AACTCCTGCT   180

TTTAGATTAA CAAATCTCCA ACCGATACAA TGAGTGCTTG CAACATACCA AGCATTATAA   240

AGAATCCTGC CTTACCTAAG   260

(2) INFORMATION FOR SEQ ID NO: 3138:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 212 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3138:

CATAAGCAAT TAATGACTTC GTTAATTGCG AAAGTGTATC TTTTTGATTA TCATTCGCTT   60

TTGCATCTTC AAGCTTTCTC ACATCTGATT TGACAGCATT ACTTTCACTA TTATCTTCAA   120

GCGATAATTT CTTAACTGCA CTTACCACTT GCTCAATTGC TTCTGCnTAT TGTCATTCGA   180

TATCGGAGTA GTAGGAAGTG CnGAATTCGG CA   212

(2) INFORMATION FOR SEQ ID NO: 3139:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 373 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3139:

TATTGGTTTT TATGCGAATA TGGATAATAA AAGGTCTCAC GACATCATTG ATAAATCGCT   60

TGAnATGTTG CGACGCTTAG ATCACAGGGG CGGGGTCGGC GCAGATGGCA TCACTGGTGA   120

TGGCGCAGGT ATTATGACTG AAATACCTTT TGCATTTTTC AAACAACATG TAACGGAGGA   180

GCACCTGTTA GAAAAGAAGG GAAATTACCT CGTGAAGTCA TTCGTTATGA GTATGACCTA   300

GAATATGGTA CAAATGTTTT AACAATGGCA CAAAGATGCA ATTGAAACCA GGTnCAACGT   360

GTGTTAnTAC AGG   373

(2) INFORMATION FOR SEQ ID NO: 3140:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 220 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3140:

AGCCTTATAA TAAAGTGCCT TTCATAGCAA TAAGTTGTGT CCATTGACCT ATTACATTTT   60

TCGTTTTGTA CATTAAATAT AAGAAATACG GTGCACCAAT AATTGCTACG ACAATACCTG   120

CTGGAACCCC CACCTGGTTG TAATACCATT TTGGCCATTT GTATCAGCTA TAACCAAGTA   180

ACCnTGCCCC AACTAAAATG GCATTGGGTA AAACCACnTG   220

(2) INFORMATION FOR SEQ ID NO: 3141:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 177 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3141:

GAGGAGCAGC ACAACCAAAT ACACAACCAG CTGGACAAGG TGATCAAGCT GATCCGAATA   60

ACGCTGCACA ACACAACCTG GAAATCAAGC AACACCGGCA AACCAAGCAG GTCAAGGnAA   120

TAACCAAGCA ACACCTAATA ATAATGCAAC ACCGGCAAAT CAAACACAGC CAGCGAT   177

(2) INFORMATION FOR SEQ ID NO: 3142:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 204 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3142:

CTTTTTTAGC ATTTGGTTTA ACAACCnGGT GTTGCAGTAT CCCCACTTAA GGTCTGTATA   60

ATTTCATTTT TATGTTCCTC GATAACTTGT ATTGCTGCTT GTTTTCCTCC ATCTGTCAAT   180

CCATCATTTG ATTGAGAGAA nCAG   204

(2) INFORMATION FOR SEQ ID NO: 3143:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 279 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3143:

GTGATGCCAT ATAAATTGGC AATAATGGCA CAAGTACTGT CAGTCCAGCA ATCGCTATAA   60

ACTGACTGAG CCATAAAATG CGAAAGTTAC TGCGCCATAT AGACTGATTA ATCATATGTC   120

ACCATTGGAT TTGGTACGGT AGTTAAACCT GAAGGCATAC TACCCTCCAC CCACTTATTC   180

AACGTTGGAT nATAGGCAAT GGGTAATTAA AAATTTTGTT TTTGAAATGG GCCCACGGGC   240

TTGTTTTAAT CAAAATTAAA AAATTGTGGT nCTTGGACC   279

(2) INFORMATION FOR SEQ ID NO: 3144:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 514 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3144:

TGACTTAATC AAAGCATTTG ATCAAAACAC CAGAATACCA TTATTCTTTA ATATGTTGTA   60

CAGTAAACTC TnTATTATTT GTTGCTGTTG GATCCATTGT TCGTCTTTCA ACAAAAACnT   120

GACCCAGAAT GAAGTCCGAT AGAGTCAACA AAGCtATAGT ATTTGTAACC ATCTTTTAGT   180

TGATaAATGC CACGCGCATC TGTTATTGCG TCATTTTTAG GTAcAAATTG AATTTkGAGA   240

TTTCTCaCaT TATCAGGTAC TTTAAATAAA CGCAAAGTTG GACCGnCTTC AACAGTCTTT   300

TCAGCAATCG TATCATTAGT ATCAGCATTT TTGATAATAA CATTTGTTGC GCCTTGACCG   360

TTTTTAGTAG TCATTGTATT AAATCAAGGT TAATTCAGAA TTCGGATTTA CTGTTAATGC   420

TTTCTCGATA CCATTAAAAT CGCCATGGTC ATTCGTATCA GTTCCAGTAT ACGGCCTAAT   480

GCAATACATT TGCCTGTGCn TGATAGTnCT TATT   514

(2) INFORMATION FOR SEQ ID NO: 3145:

(A) LENGTH: 302 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3145:

ATTCAGACTT TGCATGTGGA ATGGCCACGT TCATGCCAAT AGCTGTCGTA CTCCCATTTC   60

ACGTTCTAGT ATTGCATTTT TTAAATGCGA TGTGTGCTCT ACATAACGGC AAATTTTAAG   120

TTTTATGAAT CAACATATCC AATGGCTTCG GTTTCGAGAC ATGTCCGTGG ATTCAGTAAT   180

TAACCATAGT TTGGTTGGAT CCAAAACCAT GAGnAGGGTT TAATGGAGGA TGTnGAATGG   240

TTCnCCGGTG GTTAATCCTA CATGGTCCAC CCTCCTGGTA ACCATGGTGG TGGTAATAAC   300

CC   302

(2) INFORMATION FOR SEQ ID NO: 3146:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 332 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3146:

CAGGAATAGG ATCATTTGCA TCCATAGCTT CACTTATTTT TTCAGAAGCT AGCGTACAAT   60

CATTTAAATC TACGCCACCT TCTTTATCAA TAGAGATTCT AAGAAAATGA TCTCTACCCT   120

CTTTGACCAT ATTCAACGTC TACAAGTTCC AAAATTCAAG GTCTTCCCAT AATTGGGTTT   180

AACCAATCCA CTTTCTACCT GGTTTCCGGT AAATTTTTAC CTCCATACCA GGGnCCTCCC   240

CCTTTTTTGG GCCAAAATAG GAAAAAnGAG GCGGGGGAAA TCCTCCCCCC AATTCCnTTC   300

CTGGCCCTGG AGGTTTCCAC CTAAATTTTT TT   332

(2) INFORMATION FOR SEQ ID NO: 3147:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 204 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3147:

GAGAGTGGTT AACAAGCAAA TAGAAATAAT TAAAAATGCA GATGCAGATG CATCGGCGAA   60

CnCCAACAAA TGCAGAAGTT GCTGAATTCC AAATGTAACG ATACCTGCCC ATGAGCGATG   180

TGCTCAGAAT GATCAGAGCT AATG   204

(2) INFORMATION FOR SEQ ID NO: 3148:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 217 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3148:

CAACCGGGAC AGGTGGGGTT ATTGGACGTT ATTTTTGGCC TTTGGATTTT AAGATATTGG   60

TCGAAAAGAG ATTACATAAA ATTGTGGCCA AATGCGGATT GCATATTATT GTAACGCCGn   120

CTATTGCATT GTTGATTGTT AGGnCTATTA ACTATCTGGA TCTGTATGCC ATTAGCCAGG   180

TTTTGTTTCA GACAGTTTAG TTTCAGTAGT TAACGGA   217

(2) INFORMATION FOR SEQ ID NO: 3149:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 174 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3149:

CTATTATTAT ATTCCGCGGT GTACGTATAT GTGCTACGTT ATCTTCGTTA ATTGTACCGA   60

TTATGGCTAT CATTTACATT GGTATGGTTT TAGTAATATT GCTATTTAAT TTAGATCAAA   120

TTGTTCCTAT GATAGGTCAC GATTATTAAn AGTGCATTTG GTCATCGAAC AAGT   174

(2) INFORMATION FOR SEQ ID NO: 3150:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 181 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3150:

GGGACCGAAT TGACTTCAGC ATTACCAGCA AATTGATTAA TnTTGTGGGC TGGTATTGGC   60

TCTGGCGGTA CCATTTACAG GTACCGCACG TTATTAAAGC AACATCACGG GCAATGTTAT   120

A   181

(2) INFORMATION FOR SEQ ID NO: 3151:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 172 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3151:

GTTTTAATTG AGCGACATAC TCTTCTGTTA GCTCTGCTAC TTTTTAAAAT AGAGCGATTG   60

ACATCAAACA TAACTGCTAA ACGCTCAACG TCTGCCTTCG TAATGGCTTT TGTAGAAATT   120

CTAACTAAAT AATTTCGAAT GCTATCATTG GTTGTnTCAA CAGCTTGATG CT   172

(2) INFORMATION FOR SEQ ID NO: 3152:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 209 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3152:

ATGGACGTTG AGACATTTAT AAGCGATATA GATTTCGCAT GTTGCATTTA TTAAACCTAA   60

TAATGGTAAA CGACAAGTGT GACTGTTACT GGACTTTAAT GAAGGTAGTA ATCAGAATGG   120

AAATCAACCA AAAGTAGGTA TTTGAATnTT GGGAATAATG AGACATAGCG AGAGTGTATA   180

TGCAATACGA CAGTACTnTA AATTAAGAG   209

(2) INFORMATION FOR SEQ ID NO: 3153:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 174 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3153:

TTCTCACAAA GCGCTCAGTT GAAGTAAATC CACCTGGACA ATCCAAATGT ACCTGCTTCA   60

TTGCCTAAAG GTTCAATCGT TAnACCTTCC AATAAATTTG CTGTTGCTGG ATAAGGAGAA   120

ATTATTGGTA TATTGTCTTA AATTACTATG ATGCCAATTT AAGGTCTGGA TGAT   174

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 267 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3154:

```
GGATCACATC GTTCATTTAC ACAATCTATT AATATTCAAT GGCACAATAT AGTGTTTATG     60

GCATTACGGA TATGATTTAG TAGCnCACCA TTATTAACCG ATCTCTATCT GTTAAAAGGA     120

ACTTAAGAGC AATGTTTGCG CATCATCATT TTATGTTGCG TCTTTGCACG AGTTTTGCGA     180

AACTTTACAA TATTTGTTGC GGATGATTAT TTAACTTTTG GAGAATGTTG ATGGCACAGT     240

CCACTATAnC AATCAGTATC GCAATGG                                        267
```

(2) INFORMATION FOR SEQ ID NO: 3155:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 490 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3155:

```
AATTAAAAAT CAAGCAACTG CTGCAAAAAT GCAAGATCAA ACTGTTCCTC AAGAAGCAAA     60

TTCTCAAGTA GATAATAAAA CAACGAATGA TGCTAATAGC ATAGCAACAA ACAGTGAGCT     120

TAAAAATTCT CAAACATTAG ATTTACCACA ATCATCACCA CAAACGATTT CCAATGCGCA     180

AGGAACTAGT AAACCAAGTG TTAGAACGAG AGCTGTACGT GTTtAGCTGT TGCTGAACCG     240

GTAGTAAATG CTGCTGATGC TAAAGGTACA AATGTAAATG ATAAAGTTAC GGCAAGTAAT     300

TTCAAGTTAG AAAAGACTAC ATTTGACCCT AATCAAAGTG GTAACACATT TATGGCGGCA     360

AATTTTACAG TGACAGATAA gTGAAAyCAG GGgATTATTT TmCacGAgTT ACCAGATatT     420

TAcTGGTAAT GGAGACGTGG GATTATTCTA ATTCAnATAA TACGATGCCA ATTGCAGACA     480

TTAAAAGTAC                                                          490
```

(2) INFORMATION FOR SEQ ID NO: 3156:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 262 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3156:

CCTTCAGTAC CTTGTAATAG TTAnTTAAAT GTTCCGATCA TCGTGTAGTG TGATTCATCA   60

TACCGGCCTT TTCAATTGAA TACGATCTAA ACCGTTTCGT CAGGTGCTAG TAAGTTACCT   120

TCGCCACCTA AATAAGAAGT TCACTCGTTA CGATTTTTTC AGATAGCATC ATTGGTGGAT   180

TCGTAACTTG TGCAACAGCT GTTTAAGTAT TAATAGTGAT TCGGTCGTCT TCACATGCAT   240

TGGCGCACAA TCCnTGCACC GT   262

(2) INFORMATION FOR SEQ ID NO: 3157:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 170 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3157:

ATGGTAAAAA TTGCACTATC TGCTCGGGAA ACGATTTGC ATAACCTATT GTTAATTTTT   60

TACCTGTTGA TTTAGCTGTA TCTGnCCATT TTTTGAGCTT CTGCTGTCGT TTTAGCCATT   120

GGGTTTTCAC ACATCACATG TTTACCAGCA TGCAACCCTG GCTACAGTAA   170

(2) INFORMATION FOR SEQ ID NO: 3158:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 312 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3158:

CCAGGCAGAG GAGCAGCACA CCAATACACA ACCAGCTGGA CAAGTGATCA GCTGATCCGA   60

ATAACGTGCA CAAGACAACC TGGAATCAAG CAACACCGGC AACCAAGCAG GTCAAGGAAT   120

ACCAAGCAAC ACTAATATAA TGCACACCGG CAAATCAACA CAGCAGCGAA TGTCCAGCAG   180

CAGCGAACCA GCAGCACTGT AGCAGCAACG ACAACTCAGn CCAATGTAGC ATATGGTGAG   240

GCAGTTTATA GACATACATT GTGnCCTGCA TTCACAGTGG ATAGCAGGTC CACTGTACTG   300

TACAGTAAGT An   312

(2) INFORMATION FOR SEQ ID NO: 3159:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 171 base pairs

```
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear
```

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```
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3159:

AATCACATCA AAAACTTCAA TTGTTTACGT TGGCAACTAA CTTTATGTTA GAACGCACAC      60

AATATCTAAT GTTTAAAATC TATCGTCGCA AGATGCTTCC TGnTAATTAT CAGTGCCATT     120

TTCGATTGGG TTATACAATC TAGTAATCGC ATGATAATTT AATGCTACAA G             171

    (2) INFORMATION FOR SEQ ID NO: 3160:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 211 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

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```
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3160:

CTTGTTCATT TAATCCATAT AGTATACGAC GATGTACTGG TTTTAAACCG TCACGAACAT      60

CTGGCAATGC ACGAGCAACG ATAACACTCA TCGCATAATC TAAAAATGAT TCACGCATTT     120

CACTGGTAAT ATTTCGTTCA TTAATCnTGA TTGAGGGAAT TCCGCCCATC CAGAnGTCCC     180

CCCTCCAAAG TTCAGTTCCA CAGGGGCTAG A                                   211

    (2) INFORMATION FOR SEQ ID NO: 3161:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 321 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

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```
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3161:

GCACAGGTAG CGGTAGTGGC GGTCGTATGA TGACTTTGGT AATCTAAAGC AAAATGTACG      60

ATAATAATAA ACGTCGTTTC GTTTCTCTGA TGTAGCAGGG GCAGTGAAGA AACAAGATTA     120

TTGAATTGTT GATTTCTTGA AGATATAAAA ATTCAAGAAT GGGTCTAGGA TTCCTAAGGT     180

GTCTTCTTTT GGGCTCAGTA CGTAAACATA TTGTAGAGCG TGCAGTGAGT GGCGCACCAT     240

CTCTTTTGGG TCAGnTTTGG AGTTTTGTTT GTCGGCTGTC GGATTnTCGT ATGTAGGAAC     300

GGCTGTTCAC TTnCGTGGAT G                                              321

    (2) INFORMATION FOR SEQ ID NO: 3162:
```

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```
        (A) LENGTH: 159 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3162:

```
AACATTTGAG CAATATCAAG AAACATTAGA GTATATTTTA TCCCATCATG TAACTCGTAA    60

TACAGCAATT ATTGCTTTGG GTGGTGGTGC ACTGGTGATT TTGCTGGGTT TATTGCGGCG    120

ACACTTTTAC GAGGCGTGCA CTTTATACAA GTGCCAnCG                          159
```

(2) INFORMATION FOR SEQ ID NO: 3163:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 157 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3163:

```
GTCAGTTATG GCAAGTGCAT CAACATTTTC AGACACAGAC AAGTCTTACG GCATCTTCTA    60

TTTTTAAGCT TGAAATTTAA CAAATCATAA GCCGTATGAA TATTTAAATA TGCCACCATG    120

ATTGAATGGC CCCTTTCTAT TAGTTAnGTT TTGTGCG                            157
```

(2) INFORMATION FOR SEQ ID NO: 3164:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 216 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3164:

```
TATAAAAATA TAACGCGGAC AAAAAAGTGA GTTATTACTG ACAAAGTATn TGAGATTGTA    60

ACAGGATATA TGAAGCAATA TCAGTTGATC CAACTGTCAT AGGTATTTCA TCAGCAGGnG    120

TTGTTGATGA ACAAAAAGCG AAATTGTATA GCAGGCCAAC ATTCCGATTA TAAAGGTATA    180

ATTTTAAGGA TTATTAAAAT CATGTCTCTT ATGTCA                            216
```

(2) INFORMATION FOR SEQ ID NO: 3165:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 175 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3165:

AGAAACACTT CTATTGAATC GTCTTACTGC TGTTCTCTAT TTATAACACT TCGTATTGAA   60

TGAATTCATT ATGCCTATTT GACACATTAT TGAAGTTTTC CTAATGCCTG GATCCTTTAT   120

ACGTTACGGC TTCGTGCTAT GTTTTGGTAC ATAAAGCTTT GACATATCGA nATTC   175

(2) INFORMATION FOR SEQ ID NO: 3166:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 160 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3166:

ACTGTTACAA CAAATTAAAA ATACAACAAG CGAGATATAG TTATTGTTGC TGGAnTGTAC   60

CAAGTAGTAT TCCAAGCGAT GCTATGGCAA ATTGCACAAA TTACAGCACA GACAGGTGCT   120

AAATTAGTAG TCGACGCTGA AAAAGAATTG GGCTGAAAGT   160

(2) INFORMATION FOR SEQ ID NO: 3167:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 156 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3167:

TGTGGGGGAA ACCTGCACAG CAAAAACTAA AGCTTATCGA TACATCTAAA CATTGTATTA   60

TAAAATCAGT GCATCCTAGT CCACTGTCTG CATATAGAGG ATTCTTTGGA TCAAAACCGT   120

ATTCCAAAGC GAATGCCTAT TTAGCGTCAG TAGGnA   156

(2) INFORMATION FOR SEQ ID NO: 3168:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 174 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3168:

GTGGCGAGAA ATACCGCAAG CATAAAGATA TCTTTGATCC AACTTACCAA CAGATCAACG   120

GAAAAGTACC AGGTAACCAG GAATCAAGAT CCAGACACAG GAAAAGTGAT CGAG   174

(2) INFORMATION FOR SEQ ID NO: 3169:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 213 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3169:

TCAAACGGGG TCAATTTCAA ATGGAAAAAT TATACCGCAT CTTCTCCTGA TAACTACGTG   60

ACCTTATCTT CTTTATATTT GCAGACCACG AACATTCAAA CTGCATGCTT GCTCGATTGG   120

CAATGTCATA TAACTAGTAA CATGATCATC nCATCAAATT TAGTATGTCA AATGTCCCAA   180

TCAnTAATTT GATCGGTGTT GCTCAATTGA TTA   213

(2) INFORMATION FOR SEQ ID NO: 3170:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 380 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3170:

AAAGCACCTT TTCCTAATGA AAGTTGTGCT ACTGGTATCT GTGTTTGATT TACAAAATCT   60

TCTAATTCTT GATGGAGGTG AAAACTGTTA ATTTCATGTC CAGTAATGAT GATAGGCTGC   120

TTCGCTTGAT GCAGTTTAGT TGCTAATAAC TCTATATATG TTGATGCATC CGTATATTTA   180

GTTGCCGTCA CTTCAAATGG TGTCGGTATC TCAATTTCAG AGATTGCGAC ATCGATTGGT   240

AAATGTAAAt GAACTGGGCG TCTTTCGGCG ATTGCTGTAT TAATTAAACG TGGTATTTCG   300

GTTGTTGCAT TTTCAGGTGT GATATAACCT GTGCACGnTT ATATGTGCAA ACATTTTTCG   360

ATAGTCGTCA AATGTACCnn   380

(2) INFORMATION FOR SEQ ID NO: 3171:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 401 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3171:

TAGAAgGTAA GAAGGATCCT ATCGGTGCAA TGGGATATGA TGCGCCAATT GCAGTGTTGA   60

ACGAGCGACC AGAATCACTA TTTAATTACT TTAAACAGCT GTTTGCACAA GTTACGAATC   120

CACCAATTGA TGCGTATCGT GAAAAAATCG TAACGwGTGA ACTTTCTTAT TTAGGTGGCG   180

AAGGTAACTT ACTAGCACCT GACGAAACGG TTTTAGATCG TATTCAATTG AAAAGGCCGG   240

TATTGAATGA ATCACACTTA GCAGCGATTG ATCAGGAACA TTTTTAAATT AACTTATTTA   300

TCAACGGTAT ATGAAGGGGG ATTTGGGAAG ATGCGTTAGA AGCATTAGGC CGAGAAGCAG   360

TGGAATGCTG TTAAGCAAGG GCGCTCCAAA TTCCTAGTGG T   401

(2) INFORMATION FOR SEQ ID NO: 3172:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 166 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3172:

ACATAATTTA AAATAATATT ACATTTGTAA TGGnCACCAA GTAACGTTTC GGTTGCTTGG   60

TGTTTTTTGG TATGAATTAC TTTCTGTTAC AAAACAATCT AAAGCGTTCT GTTATGTTTT   120

ATTAAGATTT AATTACAAAC GGAAACTAAA TGTAATAGAA TAAACT   166

(2) INFORMATION FOR SEQ ID NO: 3173:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 160 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3173:

ATAATGAGAn TGTTGTACGT TATGGTGGTG GAAGTGCTGA TGGTGATTCA GCAGTAAATC   60

CGAAAGACCC AACTCCAGGG ACCGCCGGTT GACCCAGAAC CAAGTCCAGA CCCAGAACCA   120

GAACCAACGA CCAGATACCA GAACCAAGTA CCAGACCCAG   160

(2) INFORMATION FOR SEQ ID NO: 3174:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 158 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3174:

```
CTTTATATAA AGAAGGAATT ACTAAACATA CAGTTAGATT ACTTCATGCA ATCGAATTAG        60

AACGTTTGAA TTTAAGCCGT AGATTAGGTT TTGAATTATC AACAGCnAAA GAATCACGTA       120

TTGAACGGGG GTTATTTAGA ACGTGATAAA GAAGGATG                               158
```

(2) INFORMATION FOR SEQ ID NO: 3175:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 154 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3175:

```
TATTTGAAGA TGGCTGTGTA CAAAAATCGG TGTTACGTGA TCATGATACT GTCAGAATTT        60

ATAAACCATG GCTAACAGCA CATCAGCTTT CATTGCCCnA GTATGTCGTC AGAGAAGATA       120

CACCTAATCG CTAATTAATG AGGTTTGGAA ACAT                                   154
```

(2) INFORMATION FOR SEQ ID NO: 3176:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 472 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3176:

```
AGAAGGTATT TTAGCTCAAT CTCCAGGTCT AAAGGTTGTT ATTCCTTCAG CCCATACGnT        60

GCGAAAGGTT TATTAATTTC TTCTATTAGA AGTAATGACC CAGTCGTATA CTTAGAGCAT       120

ATGAAATTGT ATCGTTCATT CCGTGAAGAA GTACCTGAAG AAGAATATAC AATTGACATT       180

GGTAAGGCTA ATGTGAAAAA AGAAGGTAAT GACATTTCAA TCATCACATA CGGTGCAATG       240

GTTCAAGAAT CAATGAAAGC TGCAGAAGAA CTTGAAAAAG ATGGTTATTC TGTTGAAGTA       300

ATTGACTTAC GTACTGTTCA ACCAATCGAT GTTGACACAA TTGTAGCTTC AGTTGAAAAA       360

CTGGTCGTGC AGTTGTAGTC AAGAAGCACA CGTCAAGCTG GTGTTGGTGC ACAGTTGTAG       420

CTGAATTAGT GACGTGCATC CCTTCATTAG AAnnCCTATG GAAGAGTGCA CA               472
```

(2) INFORMATION FOR SEQ ID NO: 3177:

(A) LENGTH: 150 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3177:

```
TGAAAGCTGG CGAATACAGT GATTGTCATG ATGCGGATCT AnTTGTCATC TGTGCTGGTG        60

CTGCACAAAA ACCTGAGAGA AACACGTTTA GATTTAGTAT CTAAAAACTT GAAAATATTC       120

AAATCAATTG TTGGTGAAGT AATGGCATCA                                         150
```

(2) INFORMATION FOR SEQ ID NO: 3178:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 166 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3178:

```
TTACTCTATC TTGATTTGAC GAAATACTAT TAnGCTAATA TCGATATTTT AAAAACGAGA        60

TGATGTTCCA AAGCAAGCCA TTTCGATGGA CTGCTAATAT TCTTCAGCCA AACGTATCAT       120

TTTACTCGCA TTTGGTGAAA AGAAACGGCT GCTATTACAC ATTTAT                      166
```

(2) INFORMATION FOR SEQ ID NO: 3179:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 170 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3179:

```
CTTCGACTCT AGAGGATCCC CGCGCTCAAA TTCTAGTGTT AGATGATAGT GGATTAGTTG        60

ATAGCAATGG CTTTGCAATG CCGATGTTAC TCGCAATAAG TCATGTGCAT CAATTACTTA       120

TTAAAGCAGA TTTACGTATG TCTACAAGTT TAnTTCGCTA AATCTGGTGA                  170
```

(2) INFORMATION FOR SEQ ID NO: 3180:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 297 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3180:

```
AGCTAAGGTT GCCnTGGGCG TTGCCCCAnT TGGTTAGTCC AGGTGGTCGC GGTGGCCATC     60

GGTGTATTCG CCAGGTCCTT CAGCCAGGGT TTTTACTATT ATATCCAGTT GTAGCATTCA    120

TGATTGGGGC GATTCGAGAT AGATTCATCA ATGAAATTAA TTTCTGGATT TTATTCGTTG    180

GTATTTATTT GGGTATACAT AAGTATGGTA CATGATAGGC AGATATACAA CATTACAACA    240

TTCATTCTAC TATGCTGGAA ATAACATGAC AGTGATGACA CTACTATCCC CGTCGCA      297
```

(2) INFORMATION FOR SEQ ID NO: 3181:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 349 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3181:

```
CACTAGGTAC CCCAAAACGC CAGAGGAACT TGGTTAAATC GCACTTACTT GGTGGCTCCA     60

ATCAACTGGT ACTTCATAAC GTTTGGCATC TTCGCCACTT CACCACTATT ACTCTTTCCA    120

CCTAATTGGT TCATGGCTTG TGCTAACGTT TCATGTGCTT CCGCTGAAAT CGATCCATAA    180

CTCATCGCCC CTGTATTAAA GCGTTTGACA ATGTCACTTA CCGGTTCAAC TTGGTCGATG    240

TCAATCGgTG TACATGCTTT AAATTCAAGT AAATGTCTAA TGTGaTCTGT CTATTTTTG     300

TTnCACCGnT TnCAGAGTAT GCTTTAAATT GCGCCATAGT CCATTTTCT               349
```

(2) INFORMATION FOR SEQ ID NO: 3182:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 149 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3182:

```
TACCAACACG TACACCTTCT AAAATAACTG CATTTGCACC GTnTTAATAC ATCATCCTCG     60

TTTATAACCG GTGTAAGCAC TAGGGGGTTC AATCACACCT GCTAATACTG CGCCAGCCCT    120

ACATGTACAT TTTTACCAGT TGTAGCACG                                     149
```

(2) INFORMATION FOR SEQ ID NO: 3183:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 147 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3183:

GCGGTGCCGG TGTTGCAATT GGCGCAGTGG TGTTGGTAGC ATGTGGTCTT TCAATCAATG   60

TTCAATACAC CAGGAGATCC GGAAAAGATG CGTATGAATT TTATGGTAAG TGCACCAGGC   120

ATTACCACAC CACGCAAnAA CATGCAT   147

(2) INFORMATION FOR SEQ ID NO: 3184:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 180 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3184:

CAGCGATATG TTGGCGTTGA AAATCTGCAA TTTGTTCATA ATTCTCTGTT AAAGAACGAC   60

TTAAATTGAT AAAAATGGAT ACGATCTCTT GGTAAACAGT GACATTTTCT CAATCGGCGT   120

ATGATGTTTG TGGCACCGAC CATCGAGAAC ATGAAAATCT CATGTCCCAC GCTAGTCGnC   180

(2) INFORMATION FOR SEQ ID NO: 3185:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 150 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3185:

GGTAAATACG TATTAATCAG ATTAAGATCT GGTGAAGTTC GTATGATCTT ATCTACTTGG   60

CCGTGCTACA ATCGGGnCAA GTTGGTAACC TACAACACGG GTTAGTTAAC GTTGGTAAAG   120

CCGGCACGTT CAAGATGGGA AAGGTATCCG   150

(2) INFORMATION FOR SEQ ID NO: 3186:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 146 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

GAATTTnAGG TGAATCAGAA GATTAACGCT GTTGCGTCCT AAGCTAACAG ATACTGGTTC   60

GTCAGTTGTC GTTGAAAAAG CGAATGAACA ATTTAATAAA ACCGTAACTC GAGCATTATT   120

AGAGGAAGCT AACCAAAGCA GGTTTA   146

(2) INFORMATION FOR SEQ ID NO: 3187:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 165 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3187:

AAATTGGCGA GTATGTTGTT ATTGGGTCAG TACTCTGAAA TTAACAATAG nTACGATTGA   60

AAATGGTGTC ATGTATTCAA CAGTCTGTTG TTAATGTATG CTAGTCGTGG TGCGAATACT   120

AAGGTCGGAC CGTTTGCGCA ATTGAGACCA GGCGCGCAAT TAGGG   165

(2) INFORMATION FOR SEQ ID NO: 3188:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 166 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3188:

CAGTTTAGTG GAGACGAATC TAAACGAAAC AAAGCGATTG GACGTGCATC AGTTGTACCA   60

ACATTCTTTG GTGTAAACGn AACCAATTTT ATTTGGTGCC ACCACTAGTT ATTGGAATCC   120

TGTGTTCTTT ATTCCATTTG TATTAGCACC AATTGTTAAC GTATGG   166

(2) INFORMATION FOR SEQ ID NO: 3189:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 146 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3189:

AACCCTTTAT CTAATCCATT TTCAGTTAAG CGATGACCGC CTGCTAAAAT TTGTGCATCT   60

GATTCTTTTG CTGCATCAAT ATATGATTGA ATTTTATCTA ATTGATCCTT ACCAGTTTGA   120

(2) INFORMATION FOR SEQ ID NO: 3190:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 212 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3190:

```
TCCCCCAAAG GGTTTAAGGG GTTAACCCGG GTTTGGGAAA AATTTTTTAA CCCCCCTTAA        60

AnTTCCCGGG AAAAAGGAAA CCCGGGTTTT TAAAAAAAAC CCGGGGTTCC CAAAAATTTT       120

TTGGGAAAGG GAAAGGAAAA AAGGGTTAAA AAATTTTTGG GAAAAACCCG GGCCCAnAAA       180

AAAGGGTTTT TTTCCCCTTA AAAAAAATTT AA                                     212
```

(2) INFORMATION FOR SEQ ID NO: 3191:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 148 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3191:

```
CTTCACTGAC TTTAGCAATT TCATCACCTT TTGCCCCTAC AACGATAGCT AATGATTTAT        60

ATTGTAAACT CAnATGACCT TGTTGAATAC CTTCTGACAC AAGCGCGCGA CATGCTGCAA       120

AGTTTTGCGC TAAACCAACG GCAGCAAC                                          148
```

(2) INFORMATION FOR SEQ ID NO: 3192:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 212 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3192:

```
CTGCTAATCC GAAATCTTTT TGGAGTTTTA TTAAACCAGC TGCTTCTAAT AGTTTAAGTG        60

CACGTGCTTG GTTTGACACA TCATTTGGAA TGACAACTTT AGCnCCATCT TTAACCTTTT       120

TGACATCTTT AATTTTATCT GCAGAAATAA ATCCATCACG GATGGCTCTT AAATATATGT       180

TACGTGATAA TTTCTCGAnA AATGGCTTCC CT                                     212
```

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 141 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3193:

TCGTGCAGTG GTCTTCTGTT AATTGGTGAA TTTGGATACT GGTTATATTC AGCTGCACCG   60

CAAGCAACTT CTATTGATGG CCnAACTGCC TTTTTACCTC AAGCAATGGG TATGGTAGTT   120

GTTGCAGTCA TTTATGGCTT T   141

    (2) INFORMATION FOR SEQ ID NO: 3194:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 1290 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3194:

AATAACGTTC TGAAAAACGA AGATGTTTTA AATGCCTATA TCCGCGGTCG TGGCGGAATG   60

GCAGACGCGC TAGGTTGAGG GCCTAGTGGG AGAAATCCCG TGGAGGTTCA AGTCCTCTCG   120

GCCGCATCAA AATTCTTAAT TTAAATAAGC GGGTGTAGTT TAATGGCAAA ACCTCAGCCT   180

TCCAAGCTGA TGTTGTGGGT TCGATTCCCA TCACCCGCTC CATAGATAAT TTTAATGAAC   240

ATTGAAAACT GAATGACAAT ATGTCAACGT TAATTCCAAA AACGTAACTA TAAGTTACAA   300

ACATTATTTA GTATTTATGA GCTAATCAAA CATCATAATT TTTATGGAGA GTTTGATCCT   360

GGCTCAGGAT GAACGCTGGC GGCGTGCCTA ATACATGCAA GTCGAGCGAA CGGACGAGAA   420

GCTTGCTTCT CTGaTGTTAG CGGCGGACGG GTGAGTAACA CGTGGaTAAC CTACCTATAA   480

GACTGGGATA ACTTCGGGAA ACCGGAGCTA ATACCGGATA ATATTTTGAA CCGCATGGTT   540

CAAAAGTGAA AGACGGTCTT GCTGTCACTT ATAGATGGAT CCGCGCTGCA TTAGCTAGTT   600

GGTAAGGTAA CGGCTTACCA AGGCAACGAT GCATAGCCGA CCTGAGAGGG TGATCGGCCA   660

CACTGGAACT GAGACACGGT CCAGACTCcT ACGGGAGGCA GCAGTAGGGA ATCTTCCGCA   720

ATGGGCGAAA GCcTGACGGA GCAACGCCGC GTGAGTGATG AAGGTCTTCG GATCGTAAAA   780

CTCTGTTATT AGGGAAGAAC ATATGTGTAA GTAACTGTGC ACATCTTGAC GGTACCTAAT   840

CAGAAAGCCA CGGCTAAtAC GTGCCAGCAG CCGCGGTAAT ACGTAGGTGG CAAGCGTTAT   900

CGGCTCAACC GTGGAGGGTC ATTGGAAACT GGAAAACTTG AGTGCAGAAG AGGAAAGTGG   1020

AATTCCATGT GTAGCGGTGA AATGCGCAGA GATATGGAGG AACACCAGTG GCGAAGGCGA   1080

CTTTCTGGTC TGTAACTGAC GCTGATGTGC GAAAGCGTGG GGATCAAACA GGATTAGATA   1140

CCCTGGTAGT CCACGCCGTA AACGATGAGT GCTAAGTGTT AGGGGGTTTC CGCCCCTTAG   1200

TGCTgGCAtA ACGCATTAAG CACTCCGCCT GGGGAGTACG ACCGCAAGGT TGAAACTCAA   1260

AGGAATTGAC GGGGACCCGC ACAAGCGGTG   1290

(2) INFORMATION FOR SEQ ID NO: 3195:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 140 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3195:

TGGTACAGAG TTATCGCTGG TGGTCCTGTT CGTGCCGTAC TTGAATTATC AGGTATCACT   60

GATATCTTAA GTAAATCATT AGGATCAAAC ACACCAATCA ACATGGTTCG TGCTAACAAT   120

CGATGGTTTA CnAAACCTTA   140

(2) INFORMATION FOR SEQ ID NO: 3196:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 145 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3196:

CTATTGGATC AGGAGGCAAC TACGCTTAAG CGCAGACTGC CCATTGAAAC GCCATGCATC   60

GCATTTGTCG CCTGAAGAAA TGGCATATGA GAGCTTGAAA GTAGCGGCTG ATATTTGTGT   120

CTTTACCAAC GnTAATATTG TTGTC   145

(2) INFORMATION FOR SEQ ID NO: 3197:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 310 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

```
TGTCGAGTTG GAATTGGACG ATTGAATATC CCATCTCCAT CACTATCAAA GTATGGGAAT        60

TGAATTGTTT CTAATTCGTA TCCACCTTCT GTCATTGATA ATGTAGGGTT AATTTTAGAA       120

CCATCTkCTG TTTCTAGTTT TAAGTTCCAC TTCTTACCTT CTTCCCAACG TTGACCCATT       180

GTGCCATTAG GTACTACTAA ACTATCGCTG ATTGCATCAT GAATAACTGG CTTCCATTCn       240

CCTTGCTCTG TTGTTTGACC TAAGTCACTC GCGCTnAAAA ATCGACCCGC TTTATATCCA       300

TnTTCAGCTG                                                              310
```

(2) INFORMATION FOR SEQ ID NO: 3198:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 140 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3198:

```
TGCTTTATTA ATGCATTGGC TAATAATCCA CTTGTACCAC CACCGGCACA AAGTACTAAG        60

AGGTTTGTTC TGTGATATTT GAAGCTTTAG TGCATCGTCT GATACACCAC TTGCCGCTAA       120

AATTGAATCA GCTTTTnTCG                                                    140
```

(2) INFORMATION FOR SEQ ID NO: 3199:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 184 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3199:

```
TGGTGATTTC AAATCATGAG ACTGGGACAA AATGATGTTT TCATAAAAAT TATTTCGTTG        60

TTCCACTCTC ATGATTTTTT TGATGAACAT AATTACATGA TTGATTGCAT CATTTGTTAA       120

AACCAGTGAT TGCAACCTGC CATTCACAnG GAAAATTACC TAATAAGTGG CGTATTTACC       180

AGTC                                                                    184
```

(2) INFORMATION FOR SEQ ID NO: 3200:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 163 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3200:

```
TTGAGAAGCG TTTAGGAAGT AACGTTTAAC GACGACAGTC GTTCAATGCG ATCAAAATGT          60

TTTAACACAT GAATCGCTCT CGTACTATTC GTGTGTGACA CATGTTCTTC CAGCATTTGC          120

TTAATGAATG CTTTTTCTTC TTGGTnTTTA ATCTTTGTAA ACG                           163
```

(2) INFORMATION FOR SEQ ID NO: 3201:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 149 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3201:

```
GTTATGTTTG AGACTATAAT GAATAAATAT TTAGAAATAT GACTCCGATT GTTCGATGCT          60

TAATTCAGTT AGAAGCATCA TAAGAATGCA TGATTACTGG TGTAAAGATA CGTAATGTnT          120

TGTATTGACT GGATGTCTTT GGATAGAGT                                           149
```

(2) INFORMATION FOR SEQ ID NO: 3202:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 192 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3202:

```
CAAGTGACTG AGATTACTGA AGTAAACCCG TTACCGCCAC ACTATATTTG TCCGAACTGT          60

AAAACGAGTG AATTTTTCAA TGATGGTTCA GTAGGATCAG ATTGATTTAC CTGATAAACG          120

TGTGAAnTTG TGGAGGCCAC TATTAAAGAA GACAGAATCC GTTGAACATT TAGATAAGGG          180

AAAGTCCGAT TC                                                             192
```

(2) INFORMATION FOR SEQ ID NO: 3203:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 234 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3203:

CGCCATCTAA CGTTTTTTGT ATTCGTTGTT GCTGAGCTAG TTGTAAGTGC CnCATTAAGC   120

ATCTTATAGC GTGATAGCCA TGCGCCAACG TACAAATCTG CTCCGTATTG TACGCACCAC   180

TAAGCAGTAC ACACCAGTAA CATTTGATAG CGTTATAGCG CAATATACAG TACA   234

(2) INFORMATION FOR SEQ ID NO: 3204:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 178 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3204:

AACGCCATAA GCTACATGTA TGCTTCTTGC ATGGTTATCA TCCTCTCTTA ATGACTATCT   60

TTTAATTACG nAATGGCTTA CCAGTTTTTA ACATATGTGC AATTCTTTCA TATGATTTTT   120

AGATTTAGTA GCATAAGCAA TTTCTCCACG TTGATGTACG TGATGTAATG ATTCTGGG   178

(2) INFORMATION FOR SEQ ID NO: 3205:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 147 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3205:

TATTAATCAC GTTGTTGTGC GTTCGTGTTT TCGCAGTATT GATTTGTTGT TGCGCATTAT   60

GCATTGCATT ATTGTACTGC GTAATTGTAC CTGGCTTTTT ACCTTCAGTG CTTACTGGnT   120

CATCTAAATG ATTTTTAGCT GTGATTA   147

(2) INFORMATION FOR SEQ ID NO: 3206:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 133 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3206:

CAGCTGTACT AGTTGAGCGT ATTATCCAAA ACATTTTACG TGATGGCATT GATGTCGATC   60

GACTTTCAGT CGTAACGTTT ACAAACTTAA GCGCACGTCA nATGAAGCAT CGTGTAGACC   120

(2) INFORMATION FOR SEQ ID NO: 3207:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 145 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3207:

TAGGGACTTT GAAGCGGAGA GTCTAATGCA TATGGGCAGC ATTATGATCA GCAACTGCTG   60

AGAAAAATCC AGTTCTAGCT TGGGATTTAA ATGTGGAGTG GnTTAATGAA TGCATTAAGA   120

AGCTGCAAGA ACTTATAAGT GTGCA   145

(2) INFORMATION FOR SEQ ID NO: 3208:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 131 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3208:

AAACGGTTTT AGATCGTATT CAATTGAAAA GGACCGGTAT TGAATGnAAT CACACTTAGC   60

AGCGATTGAT CAGaACATTT TAAATTAACT TATTTATCAA CGGTATATGA AGGGGATTTG   120

GAAGATGCGT T   131

(2) INFORMATION FOR SEQ ID NO: 3209:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 157 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3209:

ATAAATTTAT CTATAATCTG TTGCTTGTTT TnCTGTTCTA CAAGTATTTT CACATTAGGT   60

CCCGCATCCA TTGTAAAATA ACACGGATAC CCCGCTTCTC GGCATTCGTG AACAGCGCCA   120

TGACATCATA ACTTTCTGCA CAGTAGGAAC GGGGGTG   157

(2) INFORMATION FOR SEQ ID NO: 3210:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 143 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3210:

AACGTAATAG ATATGGTACT TACTACATGG GAGAGAGTGC TAGATTCACA AACGGCAATC   60

10

AACCAATCAC AGTAAGAGAA GTGGGGCCAT TCTTATCTnG TCCAGTGGGT TATCAGTTCC   120

AACCTGGTGG GTATTGTGAT TAT   143

(2) INFORMATION FOR SEQ ID NO: 3211:

15

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 137 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3211:

ATGCATACTG TATGTGTTCC AGCATATACA ATTTTGnCCA TCTTTAATGA CAACTGTACC   60

25

ATTTTTCACA ACATTTAATT CATCTAATTC CTTACCCTTC AAAGTTTATC TGTTGATCTC   120

GGTAAAATTA ATTCTGC   137

30

(2) INFORMATION FOR SEQ ID NO: 3212:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 239 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double

35

        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3212:

40

ATTCACGCTT TAAAGGACGT AAATACACGA CTAGGCTGTT TACCTTTAGA TCTAAATCAG   60

AACAATTTTT TTACCATGGT GTTCCCCTTG AATTAGGAAT TTTATATAAA AATAAGCGGG   120

45

AAGCGTTGTG CCCCGCTTAC TCATAAGCTT TAATTAATGC TAAATAGTCT GACACTAGCG   180

ATTTGATAAA ACTATACTAA AATTATTTAG AAGTCACTAA GATGCTAATG ACGACnAnT   239

(2) INFORMATION FOR SEQ ID NO: 3213:

50

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 150 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3213:

```
CATCCTCAGA GTAGGAATAG CCATACCATC GAATAATTCA CGTACTGTTT CGAATTGAGG        60

TTCAAATTCT TGAGTTGTAT AGAGCTCGAA AATnTTTGCC CATTAGCATA ATCAGACTTT       120

TCAAAAGTCT TGATATTTGA TACCCACGCT                                        150
```

(2) INFORMATION FOR SEQ ID NO: 3214:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 399 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3214:

```
CTAAGCATTG GTTTAAACTA ATGTTCAGAG CTTTnTGTGG TTTGTAAAnA CAAGTATATT        60

nCGAGAACAC GTTTTTGTAT AGAGTCTCAA TTATAAAAGT TAGAATAGTT GACAACAGTG       120

TTACGATATT ATTAAACAAC TGTcTATCAT TAACGAAAGC AATTAACAAG AGTACtTGTT       180

GTGAAATCAT CGTTTAATAG TCAAAGATGA TCATCGTAGG gTAGACAACA TATCaTTGAC       240

TtAAGGAAGG GGAATGACCG ATGGGATTAA AAGATCAAGC TGTTACCTGG AGAAGGTATT       300

TTCATCAATT TCCAGAACTA TCCGATAAAG AATTTAAGAC TACACAAAAA ATTAAAGATA       360

TTTTAACAGA ACATCATATT AGAATATTAG ACTTACCAC                              399
```

(2) INFORMATION FOR SEQ ID NO: 3215:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 386 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3215:

```
CAGGTGAAAG CACAAGAGGA TTTGCTGTTT ATTTCTCTCC TGAAATTAAG AAATTCATTG        60

CAGATAATTT AGATAAATAA TTAAAACTTA GACATTCACC CAATCCTGAC AAAATATACT       120

ATAACTAACA TTTATTAATA TATATTGCAT TATTTAATAT GCATCAAAGC CAATCAACGr       180

TTGATTTTCA CCAACTCAAT TGTTGATTGG TTTTATTTAT GTATGAATGA ACAACTTTTT       240

GACATCATTA AGAATATAAA TGCGTTTGAA AGCATTTGAA AGCnACAACA TTTCTATAAA       300

ATTTTTCAAT AACAATTGCG CCACTAAAAC TCAAAATTTC CACCACCAAC ATCCAAATTA       360
```

(2) INFORMATION FOR SEQ ID NO: 3216:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 153 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3216:

AGTTGCATCA ACTGAATCCA ACGCTACGCA ATACGAATTA TTCCAATCTG GCATGCGTGT   60

TGGTAGAGAA ATTTTAGCGA CATCTCGAGC ACGGTTTACC TTGCCTTTnT TGGTGGCCAA   120

CTTGCTTTAT GCTATGGGTT TTTCAAACTT AAA   153

(2) INFORMATION FOR SEQ ID NO: 3217:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 138 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3217:

CTTTGCATAT TCTGGTTTGT AGTATTCATG GTCCGTCAAT TGTAGACCCA TCAATTGCAG   60

CCATTACATA TGCGGAATAT CGAAGCGAAC TTCAAGTTGC TTCAAGCTGG TAGAACACGC   120

AnATAAAATT ATTACATC   138

(2) INFORMATION FOR SEQ ID NO: 3218:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 487 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3218:

CACTCCAAAC CAAGGATTTA CGTGCTTTAT ATnGAGGTAA AGCACATCAT GTkGTTaATT   60

TTATGCmTTT TaTTGCmCmA GraTTAaGAG AAATTTTAGC nTCTTTAGGT TTGAAACGTG   120

TAGAAGACTT AGTTGGAAGA ACTGATTTAT TACAACGATC aTCAACATTA AAAGCGAATA   180

GCAAAGCGGC TAGTATTGAT GTTGAAAAAC TGTTATGTCC TTTCGATGGG CCAAACACAA   240

AAGAAATTCA ACAAAATCAT AATCTTGAGC ATGGATTTGA TTTAACAAAT TTATATGAAG   300

AACAACGTGA TGTAGGGGTT ATTACAGGTA GTGAGATTTC GAAACAATAT GGAGAAGCAG   420

GACTTCCTGA AAATACAATT AATGTTTATA CGAATGGTCA TGCTGGTCAA· AGTTTGCAGC   480

ATATGCA   487

(2) INFORMATION FOR SEQ ID NO: 3219:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 176 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3219:

ACCAACTCGG AATCATGCAA TGAACACCAT GGTTGAAATA AGTGAATTGC ATAAGTATCC   60

TGGCCTGGCA ATGCTGGTAT AACCTAAAAC CTTGTTGCAC GnAATGTATT CGCTACAATT   120

AATGTACCTG CAAAACCGTT TAATAAGAAG TTCGAAATCG TTGCACCTGT ATATGG   176

(2) INFORMATION FOR SEQ ID NO: 3220:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 203 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3220:

CTGATTTAGG TAATCTTTGC GCAATTGTTT TTTTACAGTT TCGGCAAATG GGTGCCCnGG   60

CAAATAAATA TTGGCTATGC TCAAACCTGA ATTAATGGTG GGTGTGTCCG CCATCGTAAT   120

TGGGnCCGCC TGAAGGGCCG CATATAAATG ATAGTGCTCT TCCGAATAAA AGGTAGGCCA   180

TATGTAATTG TTTTGTGGTT ACG   203

(2) INFORMATION FOR SEQ ID NO: 3221:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 361 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3221:

AGCTAAATCT TGCCAATATG GTATCAACTT TTCATTCCAC TGATAATCAT AAATTTCAGA   60

```
GCAATGCCAG AAATGTATTA ACAACTGGCA CGTCTAATAG ATTGCTAACG GATTGTTTAC          180

GTACGTTCAT CGGCTTCTTT CGCTTCTATC GGATCTGGAG AATTGGGATG TTATGACCAC          240

TGAACCACTT ATTTGTAAGC TCTGTCGTGA TTGACTTCAT AATGCTTGCG CTTGnCCTCA          300

TTTCTAACAA CTCATCCTAC TTACnAAATT ACCCCnGGGG TACACCTGGT CCACTTCATC          360

A                                                                          361
```

(2) INFORMATION FOR SEQ ID NO: 3222:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 152 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3222:

```
GGGGCTCCGn GGAGGCAAGG GTAGAAAATG ATGTAAACGC TGCATTACTA GGCGAATTGA          60

AATTACATCA ATATCAAGCA GAACGGATCT TTTGTATGAC GCTTGGTACA GGCATTGGGG          120

GTGCGTACAA GAATTAATCA AGGTTCATGT TG                                         152
```

(2) INFORMATION FOR SEQ ID NO: 3223:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 123 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3223:

```
TTTGTTAAAT ATAGGCCCTG CAATGAGTGT ACTGGAATGG CAATAATCAT ACCATACAGT          60

AATACATCTC CAACATTTGC CTTnAATTCT TTTCCCATGA CTACCGGTCC TGGGATGTGG          120

TGG                                                                        123
```

(2) INFORMATION FOR SEQ ID NO: 3224:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 145 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3224:

TGGTTGGTAA CCGTAAATTA ATGCCTGACA ATGATATTAG CTnCCTAAGC ATATTTCTGA   120

TGATTTAACA CATTATGAAA CGAGA   145

(2) INFORMATION FOR SEQ ID NO: 3225:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 129 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3225:

GGTATTGTCT AGTCAATTAC TAACACCATT TAATTGTGGn AAGCAAAAGC TAAAGGTTAT   60

CGTGCGCTAT TGCAGGCATT GATGCTTCCA ACAAAGTCGA GTATTCAGTT GCATCAAAAG   120

TTTGCTTTT   129

(2) INFORMATION FOR SEQ ID NO: 3226:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 170 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3226:

GACACTACCG TTCCCACGTA GCATCAATCG TCTCAGTCGC ATCGTAGTCA TCTGTATGTG   60

TTCCAGCATA TACAATTTTG CCATCTTTAA TGACAACGTA CCATTTTCAC AACATTTATT   120

CATCTAnTCC TACCCTCAAA GTTATCGTTG ATCTCGTAAA TAGTCGGCAA   170

(2) INFORMATION FOR SEQ ID NO: 3227:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 140 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3227:

TTACTGCTTT ACGTTTATCA TTTTCTAATT CAnAAATTCG TCATTCAGTT TCAACTTTAT   60

CGACAGCTGG ACTTTGCGCA GATAAATGTG CTGCTGTAAT ATCTAACACA TCGATTGCTC   120

TTATCTGGCA ATAATCGTTG   140

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 120 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3228:

GCGCCTATAA TTGCGCTACT TGATTTAATT GAGTAGATAA ATCTAATCCG AATAAATCCG   60

TGACTTGCTT GATAAATAGC AACAATGCTn CAACTAAACC AGTTAGTACT GCTTTGTTTT   120

(2) INFORMATION FOR SEQ ID NO: 3229:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 119 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3229:

GGCTATACAC CGACTACAGT AACATCTGGT AGCGACATTG AAAAAGACTC TAATGGTTTA   60

ACAACAACAG GTGTTATTAA TGGTGCTGAT AACATGTACA TTAGATAGTG GnTTCTACA   119

(2) INFORMATION FOR SEQ ID NO: 3230:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 128 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3230:

TGGGAATAGC AACCAACAAT GCGACAACAA AGCCCGCTAC AAATCTCCAT nAACTAATTG   60

CTAAATGTTG GAAAAATTTC TCCAGTCAAC AATGAAAGGC CATATGACTT TTTCCTACAA   120

GAGCAGGG   128

(2) INFORMATION FOR SEQ ID NO: 3231:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 123 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

```
AATGCAGCTA TTACTTTTCA CAGATTCCAT ATCGTTCAAC ATTTAAATAG AGAACTTAAT          60

AAGTATCGTG TACAAGTTAT GAATGAnTAC CGTAATAAAA AAGGACCTGA TTATACAATT         120

TTC                                                                      123
```

(2) INFORMATION FOR SEQ ID NO: 3232:

    (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 1656 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
       (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3232:

```
GCCTCAAAGA ACATGCTGAA CAGTCATCGC aTTCATATAG TTTGAAGTCT CGTTTAAAAC          60

CATATCTATC ATTACGGTAT GCATATCTTT TAAAACCTAT TCTTTTGTTA TTAGGACATA         120

TAAATTCATC ATTAAGTTCG TCATATTTCC AATTTTGAGT GTCGAAAATG TCACTTTTAA         180

ACTTTCTAGT TTTATCTTTA ATAAACATGC CATACGTAAT AAGTGGCGTT TTATTAAAAT         240

CATCTATAAT GGCCATATAG TTTTGCTCAC TACCATAACC TGCATCAGCT ACAAATAACC         300

GAAGtATTTT GAATCATTGT TAAAAATGGA ATTAAAGTTC TAGTATCTGT CGGGTTTTGA         360

AATAGGTCAT AGGATAAAAC AAATTGAGAA TTTGTCGCTA TTTGTAAATT GTATCCTGGC         420

TTAAGTTGGC CATTTTTCAT ATGGTCTTCC TTCATTCTCA TAAAAGTTGC ATCATGATCA         480

GTTTTAGAAA ArCTATTTCT ATCTTTAAGA ATCGATTTTT GTTCTTCATA TTTATTTTTT         540

CTTTCGGAAT AATCATCAAA TTTmTTTTTG AACTTCTTAA TCTTAGTTCT TTTTTaCGGG         600

TCTGTTTTCT AATTTGAGTA CTATCTTCGT TCTCAATAGA ATGATTTAAA yCTTCGATTT         660

CTTTATCTAA ATGACTACCA ATTAAATCTA TTTCTTCTAT TGTTAAATCG CTATCTCCAT         720

CTTCTTTTAT CTCTGGTATT ATTTTTTCTT CAACTAAGTC ACGATATAAT GTTTTTGAAT         780

TTTCGTTCAA TTTCGATTCG TGATTTTGAA TACTTTTCTT CCACACAAAT GTATACCTAT         840

TGGCATTAGC TTCTACTTTT GTACCATCAA TAAGATTTTG CTTTAAACAT TGACTATGAA         900

ACTGGATAAA TAAAGATTCA ATTAACGCAT CAGTATTAGG ATTCACTCTA ATACGATTAA         960

TAGTTTTATA AGAAGGTGTT TGATTTTGAG CTAACCACAT CATTCGAATA CTGTCATGAA        1020

GTAATTTCTC TATTCTACGA CCAGAAAATA CAGATTGAGT ATATGCATAT AAGGTGATTT        1080

TTAACATCAT TTTTGGATGA TAGGATGTTG CGCCACGATG ATGTCTGAAT TTATCGAATT        1140

CGCTATCAGG TATCGTTTCA ACAATTTCAT TAACATATCG CGAAATATCA ATTTGAGGAA        1200
```

GGCACTTCAT TAATTTAGTT TAGTGGTATT TATTAAATTA TACGAAGGGA CCCAACACAG   1320

AAAATTCAAA TTATTGAATT AAACATTTAT GTGCAAGTTT GGCAAAGTGT CTTATTTTTT   1380

AAAAGTATGT AAAAGTAAAA TTACATGTTA ATACGTAGTA TTAATGGCGA GACTCCTGAG   1440

GGAGCAGTGC CAGTCGAAGc CGAGGCTGAG ACGGCACCCT AGGAAAGCGA rCCATTCAAT   1500

ACGAaGTATT GTATAAATAG AGAACAGCAG TAAGATATTT tCTAATTGAA AATTATCTTA   1560

CTGCTGTTTT TTTAGGGATT TATGTCCCAG CCTGTTTTTT GTGATTTTTA ATAATTTGAA   1620

TATGGrAAAT GTATTAwTCt CTCATTTGTA TAGATT   1656

(2) INFORMATION FOR SEQ ID NO: 3233:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 130 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3233:

TTGCTCATAA ATCTTTTCTT GGCGCTCTGA ACACTATCTT CTATTCTGTC GGAATTTTTC   60

AAACATAGTC TTATCATTTn CTTCTAATCG CGTTAAACGC CAATCTTGTT CATGTCGTTT   120

GGTAAATCCA   130

(2) INFORMATION FOR SEQ ID NO: 3234:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 122 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3234:

GCCACGATAA AGAAGTAAGA ACAACACATG GTGTTACTGG TACAGGCTCA TGTTCTTGGG   60

AAAGTTATTT GTGnAAAATG GTGTGAATTA CCTGGGGAAA AATCAACAAA CTGACTATCC   120

AA   122

(2) INFORMATION FOR SEQ ID NO: 3235:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 173 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3235:

```
AACCAGGATA TGAAATCTGT GACTTATTGC GTTAGATCGT TTTGTAACTG CTACTATTGA        60

AGAAGCAGAC CAATATAAAG GTACCATTCA TTGCAAAGC ATTACATGCA TGAACCCAGT        120

TGACATTTAG TTAGAGATGG AAGATAGTAT TGTGCATTTG CAGnTTCCAC ATG             173
```

(2) INFORMATION FOR SEQ ID NO: 3236:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 122 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3236:

```
GCGGTGTGCA TTTGAAAATG TTATCAAGAA TATTGAGTTA ATTCGCAACG ACATTATACC        60

AGCGATTAnA AAGCATTTAT CAAAATACGA GGGGCGTCAT CATGAATATT GTATTATTGT        120

CA                                                                      122
```

(2) INFORMATION FOR SEQ ID NO: 3237:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 182 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3237:

```
TTTTTTGCCC AAAATTTTTG GGTTTTTTTT GGGTTAAAGG AAAAAAAATT TTTAAAGGGG        60

GGGGGGGGTC CCCCAAAAAT TTTTTTCCCT TCCCTTTGGT TTGGTTTTTT GGGGGGGGGG        120

CCCCCCCCCT TTGGAAAACC CCTTAAAAAA ATTTAAnGGT TAAATTGGAA AAAAAAATTT        180

AA                                                                      182
```

(2) INFORMATION FOR SEQ ID NO: 3238:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 111 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3238:

GATGAnGTTC GACAACGTAT TGTGGCAGAT GTTGCAGTTG ACTTTGAAGA A   111

(2) INFORMATION FOR SEQ ID NO: 3239:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 120 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3239:

AGTTGATCGT ATTTTCCAGA AGAGACAGAA TTAATTGATT ATCGTGTTAG TTCTGTCACT   60

GAAGGTACTG ATGCCCAAGC AGnAGTACAT GTAAGTTTAT TGATTGAGGT AAGACTGTCA   120

(2) INFORMATION FOR SEQ ID NO: 3240:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 127 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3240:

TACACATCTn TCTACGATTG TAGTTTATCG ATAGGTTTCG CATCATGAAA CGTGATAAAC   60

AACCAACATG ATGCTAGTTT GATTAAGTTT CTTCTAAACA GACTTCAAAC GGCAGTGTTT   120

AGCATAT   127

(2) INFORMATION FOR SEQ ID NO: 3241:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 124 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3241:

GACTAAAATA CATGTTGGAA TACTTGGTCC CATGGGAAAA TATTGGACTG GGTAACCCAA   60

TCACGGCTTC TGAAGTAGTT CTTTnTCTTC TATTAAAATA GCGACGGAAT CACACCTTCT   120

GCGG   124

(2) INFORMATION FOR SEQ ID NO: 3242:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 122 base pairs

            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3242:

TACGTGTATA CACCGTTATC TTTATGGCTT TGAATTTCCA TAATAAATAC ATACGGnTTT   60

TGTGCAGAGC TCAGCACATA ATCATCTTTA ACTATAGTTT CTGGGAATCA CTTCATAGTT   120

TT   122

    (2) INFORMATION FOR SEQ ID NO: 3243:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 221 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3243:

AACCTTTTCT GCAACCATAC GCCATAGgTA TGtTTTCTTT TTACAATTAA AGaGCCAACC   60

GTTGTTATAG TCTAACAATG GTTGGCTCCT CTTATTTTAT GTGCTAAAAA TTTATAGGCA   120

ATTTTATTAC AACAATGTAC ATTTAAGGTG ACCTTCATGC CAAAATCGCA TCACTCATTT   180

AATGGAAGCA GCACGTCTTC ATACAAAGTC ACGATCCTAA T   221

    (2) INFORMATION FOR SEQ ID NO: 3244:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 224 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3244:

TTGCATTTTG ATTGTCTGGT GACCTTGGCA ATGACAATTC CCGCTTGCAA TCGGTATCTT   60

CAATATTATA ATCAGGTCTT GCCTTAGATT TTCGCTAAGT ACCGGTGATT CTCTACCATC   120

ATACTCACCT CATGnGCTAT TTTTCTAGAG TGCTTCTTTT CACACTTTAT CTTATAAAAG   180

GCTAGCTACT ATTACCGATT TATCATTATT AGTGGTTTTT ACCn   224

    (2) INFORMATION FOR SEQ ID NO: 3245:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 117 base pairs
            (B) TYPE: nucleic acid
            (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3245:

GAAAGAGATT AGTGACAAGT TGGTTGTACT ATTACGTTAA AATTTGGAGA TTATGTGTGG   60

TGTTCAAGTA TGCGTTCAnT AATTGATATT GGCGCACCGT ATAACCATGT CAAAGTA   117

(2) INFORMATION FOR SEQ ID NO: 3246:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 117 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3246:

CTACAGGCTT TCGTACCACA GGATCAAAAC TACGCACTGT GCCTTGTACA TACGCATGAT   60

CAGCAATGAC ATTCCAAGTA TTACCACATG ATATTTGnCC AATTGTTACT ACCGTTC   117

(2) INFORMATION FOR SEQ ID NO: 3247:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 117 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3247:

TACACAnCTT TCTACGTGTG TAGTTTATCG ATAGGTTTCG CATCATGAAA AGTGATAAAC   60

AGCCAACATG ATGCTAGTTT GATTAAGTTT CTTCTAAACA GACTTCAAAC GGCATGT   117

(2) INFORMATION FOR SEQ ID NO: 3248:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 135 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3248:

CCCGTCCTTT GGTGGAACCG TTTTGTAGAA TTAAATAATA TTACAGAGCC GCTAGCAGTA   60

ACGATCCAAA CGAATTTACC ACCATCACGT GGATTAGGAT CGAGTGCACT GTCGCGGTTG   120

CnTTTGGTCC TGCCA   135

(i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 106 base pairs
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3249:

AAAAGCCAAC CCATGnAATG TTGGATTGGC TTTTTACATG CCATCTGAAT CTCTAATTTT   60

AAAAAAATAT GGAATATAAA TAAGACAGTA AAAATTAAAT TTCAGT   106

(2) INFORMATION FOR SEQ ID NO: 3250:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 122 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3250:

AACGCTGAAG CAGATAAAAA ACGTCGTGAT AGAAGTAGAC TTAAGAAACG AGTCTGACAn   60

TCTAGTATTC CAAGTTGAAA AAACTTTTAA CTGTATTTAG GCGAAAATAT CGGTGAAGAA   120

GA   122

(2) INFORMATION FOR SEQ ID NO: 3251:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 132 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3251:

GAACGTTGAG ATGTCACAAA CTGGTGAAAG TGCACGTTCA ATGCCAATGA CTGATAAAAC   60

CAAATTCATC AATCACAATT ACTCCGAAAG CnGGTACAGG TCACTCAGTA AGTAGTAATC   120

CCAGTACATT AA   132

(2) INFORMATION FOR SEQ ID NO: 3252:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 115 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3252:

```
GGAAAATCTT CAAATTCTGC AAATTGCCAA TTTACCTAAT AACCAAACAT CTAAGGCATG        60

TGTAATGCTG CTACnTCCGC TTCGTCATCA GCTACAATGA CAAATACAGG TGCCA            115
```

(2) INFORMATION FOR SEQ ID NO: 3253:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 140 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3253:

```
TTTCGTCAAA TTATGGGAAT AAAATAATCA TATTTAAGAT AGTAAATATT GAATAAGTTG        60

CTTTGAAATT TATAAAATGA AAGTATAGTG TCATGGGnAG TATAATAGTC AGATATATAT       120

GTAACGGCAC TATATTGAAA                                                    140
```

(2) INFORMATION FOR SEQ ID NO: 3254:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 399 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3254:

```
AAATCTCCTA CTTTTTCTAC CCATAAATAA TTGGCTAACT TTTTCATCTT ATCTTCATCC        60

TTTCTCTTCT ATTTAAAATG CTACAAATAA ATTTCCGCGA GTAATTTTAA TGTTTTACAA       120

CGCTGTTCAA TACCTGGAAT AAGCGGTGCT ACTAACACCT CATCAACTTC ArACGTAGCA       180

ATGAAATCAT CTAATTGTGC TTTAACCTwT TCTTGTGTAC CTGcAATGAT GCGTGCTTGg       240

ATGTGCTTGA ATCATCTCTT TGTCTCGATC ATTAAGCTTA TACTTTTGTG CTGTGTCTAC       300

TGAAGGAAAA TCTTCAAATT CTGCAAATGT AATTTACCnA ATAACCAAAC ATCTAAGGCA       360

GTTGTAAGCG GCnACTTCCG CTTCGTTATC AGCnACAAG                              399
```

(2) INFORMATION FOR SEQ ID NO: 3255:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 116 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3255:

ACCATTCGTC AAAATATTCC AACACGCATT TAGGTGTGCA AGGTATCGGT ACCTAACAAC   60

GAAGCTATCG TCTCACTAnC CTTAAAAGAT TTTAGAACAA CAGCTGCACT CATCAT   116

(2) INFORMATION FOR SEQ ID NO: 3256:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 106 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3256:

AAAGACCTAA GGTTATGTAA TTGGCCTAAA TTTATTAATC GTTTAAnTTC AGTTAGTAAA   60

AAGTCTGTGA GTAAGGGTGT ATGGAAACTG GTTAAATATT ATAGAG   106

(2) INFORMATION FOR SEQ ID NO: 3257:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 114 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3257:

AACGTCCATC GTAATACCTT TTGTGTCTAA TGTAACTTGT ACATCGTCTA ATAATAAGTT   60

GACGATATCT TGACAATGCA TCTTTATCTA GATGTAAGAn TTCAACGGAT GCCG   114

(2) INFORMATION FOR SEQ ID NO: 3258:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 117 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: double
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3258:

TTAAAGCAGT TAATCCACAG GGAAAGTGGT TAATACAGTT GGGCTCTGGT GGATAGTACA   60

GTTGCAGGCA TGGTGGGCTG GGAATTGCTT CAGGGTTTAA CGAnTGGGAA AAGCCTT   117

(2) INFORMATION FOR SEQ ID NO: 3259:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 124 base pairs

2500